



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 101115

TO: Ruixiang Li
Location: CM1/10D19/10E18
Art Unit: 1646
Wednesday, August 13, 2003

Case Serial Number: 09/727739

From: Edward Hart
Location: Biotech-Chem Library
CM1-6B02
Phone: 305-9203

edward.hart@uspto.gov

Search Notes

Examiner Li,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

ABSSP2

SEQ ID 2 & 16

Commercial DB's

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:45:37 ; Search time 46.7949 seconds
(without alignments)
84.799 Million cell updates/sec

Title: US-09-727-739B-16
Perfect score: 147
Sequence: 1 SVDNLPFRKAGCKNFYKGFSC 25

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 1107863 seqs, 158726573 residues
Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_19Jun03.*
1: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
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22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	147	100.0	111	AAU07668	Rainbow trout prep
2	138	93.9	125	AAF20029	Sequence of prepro
3	134	91.2	115	AAU07667	Rainbow trout prep
4	132	89.8	28	AAU07667	Somatostatin-28 an
5	132	89.8	28	AAU07667	Analogue of angler
6	107	72.8	114	AAU07666	Rainbow trout prep
7	107	72.8	121	AAU07666	Sequence of prepro
8	105	71.4	25	AAU07666	Sequence of somato
9	105	71.4	25	AAU07666	Somatostatin relat

10	105	71.4	28	AAU07668	Somatostatin analo
11	105	71.4	28	AAU07668	Mouse somatostatin
12	105	71.4	28	AAU07668	Somatostatin pepti
13	105	71.4	28	AAU07668	Peptide hormone so
14	105	71.4	28	AAU07668	Somatostatin relat
15	105	71.4	28	AAU07668	Mammalian somatost
16	105	71.4	28	AAU07668	Human somatostatin
17	105	71.4	28	AAU07668	Somatostatin relat
18	105	71.4	28	AAU07668	Somatostatin-28 (S
19	105	71.4	28	AAU07668	Rat preprosomatost
20	105	71.4	28	AAU07668	Rat preprosomatost
21	105	71.4	28	AAU07668	Human secreted pro
22	105	71.4	28	AAU07668	Human somatostatin
23	105	71.4	28	AAU07668	MWPSp-MWPSp20-(His
24	105	71.4	28	AAU07668	Human DTHP polype
25	105	71.4	28	AAU07668	Swine duodenum eic
26	105	71.4	28	AAU07668	Somatostatin relat
27	105	71.4	28	AAU07668	Somatostatin analo
28	105	71.4	28	AAU07668	Somatostatin relat
29	105	71.4	28	AAU07668	Somatostatin-28 an
30	105	71.4	28	AAU07668	Somatostatin-28 pe
31	105	71.4	28	AAU07668	Somatostatin-28 an
32	105	71.4	28	AAU07668	Sequence of [D-Trp
33	105	71.4	28	AAU07668	Somatostatin-28 pe
34	105	71.4	28	AAU07668	Somatostatin-28 an
35	105	71.4	28	AAU07668	Somatostatin analo
36	105	71.4	28	AAU07668	Somatostatin analo
37	105	71.4	28	AAU07668	Radioactively tagg
38	105	71.4	28	AAU07668	Somatostatin-28 an
39	105	71.4	28	AAU07668	Somatostatin-28 pe
40	105	71.4	28	AAU07668	Somatostatin-28 an
41	105	71.4	28	AAU07668	Rainbow trout soma
42	105	71.4	28	AAU07668	Somatostatin-28 pe
43	105	71.4	28	AAU07668	Somatostatin-28 an
44	105	71.4	28	AAU07668	Somatostatin antig
45	105	71.4	28	AAU07668	Somatostatin antig

ALIGNMENTS

RESULT 1

AAU07668

ID AAU07668 standard; Protein; 111 AA.

XX AAU07668;

AC AAU07668;

DT 04-DEC-2001 (first entry)

XX Rainbow trout preprosomatostatin II (PPSS-II') polypeptide.

Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I; PPSS-II'; PPSS-II'; endocrine tumour; pituitary gland; glucagonoma; AIDS; gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus; carcinoid syndrome; cell proliferation; apoptosis; growth hormone; glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV; epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective; neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic; anti-human immunodeficiency virus; osteopathic; anticonvulsant.

XX Oncorhynchus mykiss.

XX Key Location/Qualifiers

FT Peptide 1..25

FT Peptide /note= "Signal peptide"

FT Protein 1..86

FT Protein /note= "PPSS-II' pre-sequence"

FT Protein 26..111

FT Protein /note= "Mature PPSS-II'"

FT Peptide 87..97

FT Peptide /note= "PPSS-II' pro-sequence"

FT Peptide 87..111

FT Peptide /note= "Prosomatostatin II'"

FT Cleavage-site 96..97 /note- "Dibasic cleavage site"
FT Peptide 98..111
FT /note- "SS-14 variant peptide"

PN CA2325169-A1.
XX 03-JUN-2001.
PD
XX
XX
XX
XX 01-DEC-2000; 2000CA-2325169.
XX 03-DEC-1999; 99US-0168934.
XX (NDSU-) NDSU RES FOUND.
XX Sheridan MA, Moore CA, Kittelson JD;
PI
XX
XX WPI; 2001-425997/46.
DR N-PSDB; AAS12935.

XX New somatostatin polypeptides derived from Oncorhynchus mykiss, useful
PT for treating diabetes mellitus, acromegaly, gastrinoma, acquired
PT immunodeficiency syndrome and neurological disorders -

XX Claim 1; Fig 3; 52pp; English.

XX The invention relates to an Oncorhynchus mykiss somatostatin polypeptide
CC containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of
CC preprosomatostatin II (PPSS-II). The protein sequences and their
CC associated polynucleotides are useful for identifying modified
CC somatostatin polypeptide which functions as a somatostatin agonist useful
CC for research, therapeutics or diagnostics, including medical and
CC veterinary applications. The wild-type somatostatin and its modified
CC version are useful for treating hypersecretion from endocrine tumours in
CC the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g.
CC gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage
CC through their effects on cell proliferation and apoptosis and as adjuncts
CC in the treatment of diabetes mellitus via inhibition of growth hormone
CC and glucagon. In addition, dysfunctional somatostatin secretion is
CC associated with acquired immunodeficiency syndrome (AIDS) and various
CC neurological disorders (e.g. epilepsy, Alzheimer's disease and
CC Huntington's disease) and somatostatin antagonists are effective in the
CC treatment of such conditions. Nucleic acids encoding the polypeptides are
CC useful in gene therapy and fusion peptides can be targeted to neoplasms
CC and their metastases, inhibiting the release of their secretory products.
CC This sequence represents O. Mykiss PPSS-II, protein.
CC Note: The features for this sequence are specifically claimed in the
CC specification.

XX Sequence 111 AA;

Query Match 100.0%; Score 147; DB 22; Length 111;
Best Local Similarity 100.0%; Pred. No. 2.1e-14;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SVDNLPPIPRERKAGCKNFYWKGTSC 25
Db 87 SVDNLPPIPRERKAGCKNFYWKGTSC 111

RESULT 2

AAP20029
ID AAP20029 standard; Protein; 125 AA.

XX
AC AAP20029;

XX 25-MAR-2003 (updated)

DT 16-AUG-2002 (updated)

DT 14-AUG-1992 (first entry)

XX Sequence of preprosomatostatin-2 encoded on pLaS2.

XX Somatostatin; growth hormone; peptide hormone; secretion.

XX Lophius americanus.
OS
XX
XX Key Location/Qualifiers
FT Protein 112..125
FT /label= Somatostatin II

XX EP46669-A.

XX 03-MAR-1982.

XX 21-AUG-1981; 81EP-0303825.

XX 25-AUG-1980; 80US-0181046.

XX (REGC) UNIV CALIFORNIA.

XX Hobart P, Crawford R, Pictet RL, Rutter WJ;

XX WPI; 1982-18113E/10.

XX N-PSDB; AAN20034.

XX New somatostatin and precursors - produced by transformed
PT microorganisms

XX Example; Fig 3; 50pp; English.

XX The inventors claim preprosomatostatin-1, prosomatostatin-1,
CC preprosomatostatin-2, prosomatostatin-2 and somatostatin-2; and DNA
CC encoding them. The translation of somatostatin mRNA yields a
CC precursor (prepro S1) containing a signal peptide which may be
CC released during the transit into the endoplasmic reticulum, and the
CC resultant precursor (pro S1) is subsequently cleaved to yield S1
CC itself. The prepeptide portion of prepro S1 is probably about 20-25
CC bases long. Translation of pLaS2 predicts the sequence of a 125 AA
CC peptide which surprisingly contains a 14 AA sequence at its carboxy
CC terminus which differs from S1 by only 2 AAs, and is termed
CC Somatostatin 2 (S2).
CC (Updated on 16-AUG-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 125 AA;

Query Match 93.9%; Score 138; DB 3; Length 125;
Best Local Similarity 92.0%; Pred. No. 5.5e-13;
Matches 23; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 SVDNLPPIPRERKAGCKNFYWKGTSC 25
Db 101 STNNLPPIPRERKAGCKNFYWKGTSC 125

RESULT 3

AAU07667

XX AAU07667 standard; Protein; 115 AA.

XX AAU07667;

XX 04-DEC-2001 (first entry)

XX Rainbow trout preprosomatostatin II (PPSS-II') polypeptide.

XX Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I;
KW PPSS-II'; PPSS-II'; endocrine tumour; pituitary gland; glucagonoma; AIDS;
KW gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus;
KW carcinoid syndrome; cell proliferation; apoptosis; growth hormone;
KW glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV;
KW epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective;
KW neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic;
KW anti-human immunodeficiency virus; osteopathic; anticonvulsant.

XX Oncorhynchus mykiss.

PH Key Location/Qualifiers
FT Peptide 1..25
FT Protein /note= "Signal peptide"
FT Protein 1..87
FT Protein /note= "PPSS-II' pre-sequence"
FT Protein 26..115
FT Misc-difference 74 /note= "Mature PPSS-II'"
FT Peptide /note= "Encoded by CAA"
FT Peptide 88..101
FT Peptide /note= "PPSS-II' pro-sequence"
FT Peptide 88..115
FT Cleavage-site 100..101 /note= "Prosomatostatin II'"
FT Peptide 102..115 /note= "Dibasic cleavage site"
FT Peptide /note= "SS-14 variant peptide"

CA2325169-A1.

03-JUN-2001.

01-DEC-2000; 2000CA-2325169.

03-DEC-1999; 99US-0168934.

(NDSU-) NDSU RES FOUND.

Sheridan MA, Moore CA, Kittelson JD;

WPI; 2001-425997/46.

N-PSDB; AAS12934.

New somatostatin polypeptides derived from Oncorhynchus mykiss, useful for treating diabetes mellitus, acromegaly, gastrinoma, acquired immunodeficiency syndrome and neurological disorders -

Claim 2; Fig 3; 52pp; English.

The invention relates to an Oncorhynchus mykiss somatostatin polypeptide containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of preprosomatostatin II (PPSS-II). The protein sequences and their associated polynucleotides are useful for identifying modified somatostatin polypeptide which functions as a somatostatin agonist useful for research, therapeutics or diagnostics, including medical and veterinary applications. The wild-type somatostatin and its modified version are useful for treating hypersecretion from endocrine tumours in the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g. gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage through their effects on cell proliferation and apoptosis and as adjuncts in the treatment of diabetes mellitus via inhibition of growth hormone and glucagon. In addition, dysfunctional somatostatin secretion is associated with acquired immunodeficiency syndrome (AIDS) and various neurological disorders (e.g. epilepsy, Alzheimer's disease and Huntington's disease) and somatostatin antagonists are effective in the treatment of such conditions. Nucleic acids encoding the polypeptides are useful in gene therapy and fusion peptides can be targeted to neoplasms and their metastases, inhibiting the release of their secretory products. This sequence represents O. Mykiss PPSS-II' protein.

Note: The features for this sequence are specifically claimed in the specification.

Sequence 115 AA;

Query Match 91.2%; Score 134; DB 22; Length 115;
Best Local Similarity 95.7%; Pred. No. 2e-12;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 3 DNLPPIPRKAGCKNFYWKGTSC 25

:|||||

93 NNLPPIPRKAGCKNFYWKGTSC 115

Db

RESULT 4
AAP61714
ID AAP61714 standard; Protein; 28 AA.

XX AAP61714;

AC 25-MAR-2003 (updated)

DT 28-JUL-1991 (first entry)

XX Somatostatin-28 analogue.

DE Somatostatin-28; insulin-selective; insulinoma.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 23

FT /label= Hyl, Lys

XX EP173527-A.

PN 05-MAR-1986.

XX 16-AUG-1985; 85EP-0305867.

PF 31-AUG-1984; 84US-0646610.

PR 01-APR-1987; 87US-0033295.

XX (SALK) SALK INST.BIOLOGICAL STUDIES.

XX Spiess J, Noe BD;

PI WPI; 1986-063363/10.

XX Angler fish somatostatin-28 and analogue and fragment - useful in inhibiting insulin secretion in insulinoma.

DR Claim 4; Page 18; 19pp; English.

XX The protein sequence is an insulin-selective analogue of anglerfish somatostatin-28, which is more potent than somatostatin-14 or somatostatin-28 in inhibiting insulin secretion for treatment of insulinoma.

CC (Updated on 25-MAR-2003 to correct PR field.)

CC (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 28 AA;

Query Match 89.8%; Score 132; DB 7; Length 28;

Best Local Similarity 88.0%; Pred. No. 9.4e-13;

Matches 22; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 1 SVDNLPPIPRKAGCKNFYWKGTSC 25

:|||||

4 STNNLPPIPRKAGCKNFYWKGTSC 28

Db

RESULT 5

AAP90989

ID AAP90989 standard; peptide; 28 AA.

XX AAP90989;

AC 25-MAR-2003 (updated)

DT 08-JUN-1990 (first entry)

XX Analogue of anglerfish somatostatin 28.

XX Somatostatin 28; SS-28; analogue; insulin secretion inhibitor; insulinoma; gastric acid secretion; thermoregulation.

XX Anglerfish.

Key Location/Qualifiers
Disulfide-bond 17
Disulfide-bond 28 /note="Bonded to Cys-28"
Misc-difference 23 /note="Bonded to Cys-17"
Region 15..28 /label=Lys, Hyl
/note="Also claimed"

US4816438-A.

28-MAR-1989.

01-APR-1987; 87US-0033295.

01-APR-1987; 87US-0033295.

31-AUG-1984; 84US-0646610.

(SALK) SALK INST BIOLOGICAL STUDIES.

Spless J, Noe BD;

WPI; 1989-113910/15.

Angler fish somatostatin-28 and fragments -
useful in inhibiting insulin secretion and insulinoma

Claim 1; page 65; 8pp; English.

It is called ASS-28 because it is an analogue of anglerfish somatostatin (SS-28). It is more potent than either somatostatin 14 (SS-14) or SS-28 at inhibiting insulin secretion for the treatment of insulinoma. The 14-residue C-terminal peptide is also claimed (ASS-14). ASS-14 is useful for inhibiting insulin secretion by the pancreas. ASS-28 and ASS-28 may be useful for decreasing gastric acid secretion and influencing thermoregulation. Their reduced linear forms, wherein the disulphide bridge is not present and is replaced by H, is also claimed.
(Updated on 25-MAR-2003 to correct PA field.)

Sequence 28 AA;

Query-Match 89.8%; Score 132; DB 10; Length 28;
Best Local Similarity 88.0%; Pred. No. 9.4e-13;
Matches 22; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 SVDNLPERRRAGCKNFYWGFTSC 25
| :|||||
Db 4 STNNLPERRRAGCKNFYWGFTSC 28

RESULT 6

J007666

AAU07666 standard; Protein; 114 AA.

AAU07666;

04-DEC-2001 (first entry)

Rainbow trout preprosomatostatin I (PPSS-I) polypeptide.

Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I; PPSS-II; PPSS-III; endocrine tumour; pituitary gland; glucagonoma; AIDS; gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus; carcinoid syndrome; cell proliferation; apoptosis; growth hormone; glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV; epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective; neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic; anti-human immunodeficiency virus; osteopathic; anticonvulsant.

Oncorhynchus mykiss.

Key Location/Qualifiers

Peptide 1..24 /note="Signal peptide"
Protein 1..88 /note="PPSS-I pre-sequence"
Protein 25..114 /note="Mature PPSS-I"
Peptide 89..100 /note="PPSS-I pro-sequence"
Peptide 89..114 /note="Prosomatostatin I"
Cleavage-site 99..100 /note="Dibasic cleavage site"
Peptide 101..114 /note="SS-14 peptide"

CA2325169-A1.

03-JUN-2001.

01-DEC-2000; 2000CA-2325169.

03-DEC-1999; 99US-0168934.

(NDSU-) NDSU RES FOUND.

Sheridan MA, Moore CA, Kittelson JD;

WPI; 2001-425997/46..

N-PSDB; AAS12933.

New somatostatin polypeptides derived from Oncorhynchus mykiss, useful for treating diabetes mellitus, acromegaly, gastrinoma, acquired immunodeficiency syndrome and neurological disorders -

Claim 1; Fig 2; 52pp; English.

The invention relates to an Oncorhynchus mykiss somatostatin polypeptide containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of preprosomatostatin II (PPSS-II). The protein sequences and their associated polynucleotides are useful for identifying modified somatostatin polypeptide which functions as a somatostatin agonist useful for research, therapeutics or diagnostics, including medical and veterinary applications. The wild-type somatostatin and its modified version are useful for treating hypersecretion from endocrine tumours in the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g. gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage through their effects on cell proliferation and apoptosis and as adjuncts in the treatment of diabetes mellitus via inhibition of growth hormone and glucagon. In addition, dysfunctional somatostatin secretion is associated with acquired immunodeficiency syndrome (AIDS) and various neurological disorders (e.g. epilepsy, Alzheimer's disease and Huntington's disease) and somatostatin antagonists are effective in the treatment of such conditions. Nucleic acids encoding the polypeptides are useful in gene therapy and fusion peptides can be targeted to neoplasms and their metastases, inhibiting the release of their secretory products. This sequence represents O. Mykiss PPSS-I protein.

Note: The features for this sequence are specifically claimed in the specification.

Sequence 114 AA;

Query Match 72.8%; Score 107; DB 22; Length 114;
Best Local Similarity 85.7%; Pred. No. 2.4e-08;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRRAGCKNFYWGFTSC 25

| :|||||

Db 94 LAPRRRAGCKNFYWGFTSC 114

RESULT 7

AAP20028

ID AAP20028 standard; Protein; 121 AA.

XX AC AAP20028;
XX DT 25-MAR-2003 (updated)
XX DT 16-AUG-2002 (updated)
XX DT 14-AUG-1992 (first entry)
XX DE Sequence of preprosomatostatin-1 encoded on pLasi.
XX KW Somatostatin; growth hormone; peptide hormone; secretion.
XX OS Lophius americanus.
XX FH Key
XX FT Protein
XX FT 108..121
XX FT /label= Somatostatin I
XX N EP46669-A.
XX PD 03-MAR-1982.
XX PF 21-AUG-1981; 81EP-0303825.
XX PR 25-AUG-1980; 80US-0181046.
XX PA (REGC) UNIV CALIFORNIA.
XX PI Hobart P, Crawford R, Pictet RL, Rutter WJ;
XX N-PSDB; AAN20033.
XX PS New somatostatin and precursors - produced by transformed microorganisms
XX PS Example; Fig 3; 50pp; English.
XX CC The inventors claim preprosomatostatin-1, prosomatostatin-1, prosomatostatin-2, prosomatostatin-2 and somatostatin-2; and DNA encoding them. The translation of somatostatin mRNA yields a precursor (prepro S1) containing a signal peptide which may be released during the transit into the endoplasmic reticulum, and the resultant precursor (pro S1) is subsequently cleaved to yield S1. bases long. The prepeptide portion of prepro S1 is probably about 20-25 peptide which surprisingly contains a 14 AA sequence at its carboxy terminus which differs from S1 by only 2 AAs, and is termed Somatostatin 2 (S2).
XX CC (Updated on 16-AUG-2002 to add missing OS field.)
XX CC (Updated on 25-MAR-2003 to correct PA field.)
XX SQ Sequence 121 AA;
Query Match 72.8%; Score 107; DB 3; Length 121;
Best Local Similarity 85.7%; Pred. No. 2.6e-08;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRERKAGCKNFYWKGTSC 25
DB 101 LAPRERKAGCKNFYWKGTSC 121
RESULT 8
AAP20198
ID AAP20198 standard; Protein; 25 AA.
XX AC AAP20198;
XX DT 16-AUG-2002 (updated)
XX DT 14-AUG-1992 (first entry)
XX DE Sequence of somatostatin-25 analogue.
XX

KW Somatostatin; hormone; growth hormone release; inhibition.
XX Mammalia.
XX OS Synthetic.
XX FH Key
XX FT Modified-site 1
XX FT /label= H-S
XX FT Disulfide-bond 14..25
XX FT Modified-site 25
XX FT /label= C-OH
XX PN US4316891-A.
XX PD 23-FEB-1982.
XX PF 14-JUN-1980; 80US-0159801.
XX PR 14-JUN-1980; 80US-0159801.
XX PA (SALK-) SALK INST BIOLOG.
XX PI Guillemin RCL, Esch FS, Bohlen P, Brazeau PE, Ling NC;
XX DR WPI; 1982-19801E/10.
XX PT Extended somatostatin analogues - with increased inhibition of growth hormone release
XX PS Claim 6; Column 12; 7pp; English.
XX CC The inventors claim a pharmaceutical compsn. which comprises (i) synthetic somatostatin-28 (SS-28), SS-25 or (D-Trip(22))-SS-28 and (ii) a liq. or solid carrier, and SS-28 derivs. and SS-25 derivs. The compsn. and derivs. are more potent than somatostatin in inhibiting release of growth hormone; they also inhibit basal and stimulated insulin and glucagon secretion. (D-Trip(22))-SS-28 exhibits very substantial increases in potency w.r.t. inhibition of growth hormone secretion.
XX CC (Updated on 16-AUG-2002 to add missing OS field.)
XX SQ Sequence 25 AA;
Query Match 71.4%; Score 105; DB 3; Length 25;
Best Local Similarity 81.0%; Pred. No. 1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRERKAGCKNFYWKGTSC 25
DB 5 MAPRERKAGCKNFYWKGTSC 25
RESULT 9
AAB91017
ID AAB91017 standard; Peptide; 25 AA.
XX AC AAB91017;
XX DT 22-JUN-2001 (first entry)
XX DE Somatostatin related peptide SEQ ID NO:191.
XX KW Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimide; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200069900-A2.
XX PD 23-NOV-2000.
XX

PF 17-MAY-2000; 2000WO-US13576.
XX
PR 17-MAY-1999; 99US-0134406.
PR 10-SEP-1999; 99US-0153406.
PR 15-OCT-1999; 99US-0159783.
XX
PA (CONJ-) CONJUCHEM INC.
XX
PI Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudeau K;
XX
XX WPI; 2001-112059/12.
DR
XX
XX Modifying and attaching therapeutic peptides to albumin prevents
PT -peptidase degradation, useful for increasing length of in vivo activity
PT
XX
XX
PS Disclosure; Page 252; 733pp; English.
XX
XX The present invention describes a modified therapeutic peptide (I)
CC comprising a therapeutically active amino acid region (III) and a
CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC a less therapeutically active amino acid region (IV), which covalently
CC bonds with amino/hydroxyl/thiol groups on blood components to form a
CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC factors and neurotransmitters, to protect them from peptidase activity
CC in vivo for the treatment of various disorders. Endogenous therapeutic
CC peptides are not suitable as drug candidates as they require frequent
CC administration due to rapid degradation by peptidases in the body.
CC Modifying and attaching therapeutic peptides to albumin prevents or
CC reduces the action of peptidases to increase length of activity (half
CC life) and specificity as bonding to large molecules decreases
CC intracellular uptake and interference with physiological processes.
CC AAB90829 to AAB92441 represent peptides which can be used in the
CC exemplification of the present invention.
XX
SQ Sequence 25 AA;

Query Match 71.4%; Score 105; DB 22; Length 25;
Best Local Similarity 81.0%; Pred. No. 1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
: |||||:|||||:|||||
Db 5 MAPRRKAGCKNFFWKTFSC 25

RESULT 10
AAW51859
ID AAW51859 standard; peptide; 28 AA.
XX
XX AAW51859;
JT 10-SEP-1998 (first entry)
XX
XX Somatostatin analogue for the treatment of syndrome X of Reaven.
DE
KW Somatostatin analogue; syndrome X of Reaven; hyperinsulinaemia syndrome;
KW diazoxide; cyclothiazide; metformin.
XX
OS Synthetic.
XX
PN WO9810786-A2.
XX
XX 19-MAR-1998.
PD
XX 10-SEP-1997; 97WO-IL00301.
PF
XX
XX 10-OCT-1996; 96IL-0119403.
PR
XX 12-SEP-1996; 96IL-0119250.
XX
PA (COHE/) COHEN Y.
XX

PI Cohen Y;
XX
DR WPI; 1998-271636/24.
XX
XX Composition for treatment of the risk factors of syndrome X of
PT Reaven - (hyperinsulinaemia syndrome) comprises somatostatin,
PT diazoxide, cyclothiazide (or their analogues) and/or metformin
XX
XX Claim 42; Page 41; 45pp; English.
PS
XX
XX The invention relates to a pharmaceutical composition for treatment of
CC the risk factors of syndrome X of Reaven (hyperinsulinaemia syndrome). It
CC comprises somatostatin, diazoxide, cyclothiazide (or an analogue of one
CC of these) or metformin as the active ingredient. The composition reduces
CC resistance to insulin, and so treats and prevents all the associated risk
CC factors at once. The risk factors are hypertension, dyslipidaemia
CC (raised triglyceride and LDL levels with reduced HDL levels), shorter
CC coagulation time due to increased Plasminogen Activator Inhibitor-1
CC levels, core obesity, glucose intolerance hyperinsulinaemia. The
CC composition reduces the incidence of ischaemic heart disease,
CC cerebrovascular disorders, intermittent claudication, ischaemic bowel
CC disease, impotence due to peripheral vascular disease, hypercoagulation
CC (e.g. renal vein thrombosis), obesity and glucose intolerance. The
CC present sequence represents a specifically claimed somatostatin analogue.
XX
SQ Sequence 28 AA;
Query Match 71.4%; Score 105; DB 19; Length 28;
Best Local Similarity 81.0%; Pred. No. 1.1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
: |||||:|||||:|||||
Db 8 MAPRRKAGCKNFFWKTFSC 28

RESULT 11
AAW51859
ID AAY28703 standard; peptide; 28 AA.
XX
XX AAY28703;
XX
XX 07-OCT-1999 (first entry)
DE Mouse somatostatin SS-28 hormone.
XX
XX Mouse somatostatin SS-28 hormone; growth hormone; insulin; glucagon;
KW thyroid stimulating hormone; octreotide; cell-based delivery of insulin;
KW glucose-stimulated insulin secretion; SSTRV; somatostatin receptor;
KW mouse somatostatin receptor type V gene; diabetes.
XX
OS Mus musculus.
XX
XX WO9935242-A1.
PD 15-JUL-1999.
XX
XX 11-JAN-1999; 99WO-US00633.
PF
XX 03-JUN-1998; 98US-0087848.
PR 12-JAN-1998; 98US-0071193.
PR 12-JAN-1998; 98US-0071209.
PR 12-JAN-1998; 98US-0072556.
PR 03-JUN-1998; 98US-0087821.
XX
PA (BETA-) BETAGENE INC.
XX
XX Clark SA, Quaade C;
PI
XX WPI; 1999-444195/37.
DR
XX New defined medium for culture of neuroendocrine cells, e.g. of
PT insulin-secreting cells

xx Example 8; Page 143; 312pp; English.
xx The present sequence is a mouse somatostatin (SS-28) hormone which
cc was found to inhibit the release of growth hormone, thyroid stimulating
cc hormone, insulin and glucagon. In addition, SS-28 and its analogue
cc Octreotide may inhibit growth of some tumours. The hormone was
cc used to study its effect on glucose-stimulated insulin secretion in
cc high expressing and non-expressing clones of mouse somatostatin
cc receptor, type V gene (SSRV). The insulin secretion was highly inhibited
cc in the high expressing clone as compared to the non-expressing clone
cc because the high expressing clone showed high sensitivity to
cc somatostatin. The hormone effectively inhibits insulin secretion in the
cc absence of glucose. The somatostatin receptor can be introduced in cell
cc lines, used in cell-based delivery of insulin for treating diabetes, for
cc precise regulation of insulin release.

QY Sequence 28 AA;
Query Match 71.4%; Score 105; DB 20; Length 28;
Best Local Similarity 81.0%; Pred. No. 1.1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFYWKGTSC 25
Db : ||||| ||||| ||||| |||||
8 MAPRRKAGCKNFFWKFTSC 28

RESULT 12
AAY24384
ID AAY24384 standard; peptide; 28 AA.
XX AAY24384;
AC
DT 20-SEP-1999 (first entry)
XX Somatostatin peptide hormone SS-28.
DE
XX
KW Glucagon-like peptide I receptor; GLP-1 receptor; drug screening;
KW secretory function; immortalised neuroendocrine secretory cell;
KW regulation; diabetes; insulin secretion; neuroendocrine-based disorder;
KW Parkinson's disease; athyrotic cretinism; Addison's disease.
XX Mus musculus.
OS
XX WO9935495-A2.
N
XX
PD 15-JUL-1999.
XX
XX
PF 11-JAN-1999; 99WO-US00551.
XX
XX 03-JUN-1998; 98US-0087848.
PR 12-JAN-1998; 98US-0071193.
PR 12-JAN-1998; 98US-0071209.
PR 12-JAN-1998; 98US-0072556.
PR 03-JUN-1998; 98US-0087821.
XX (BETA-) BETAGENE INC.
PA
XX Clark SA, Quaade C, Thigpen AE;
PI WPI; 1999-430454/36.
XX
XX New modulators of secretory function, used to control peptide
PT secretion from cells in vivo or in vitro, specifically for treating
PT diabetes
PT
XX Example 8; Page 153-154; 309pp; English.
PS
XX The present invention describes a method for identifying modulators (I)
CC of secretory function by treating an immortalised cell, having a stable
CC secretory function, with a test compound and detecting any change in
CC secretion caused by the compound. (I) are used to control secretion of

CC polypeptides from cells, in vivo or in vitro. Specifically they are used
CC for treating or preventing diabetes by regulation of insulin secretion,
CC but can also be used in cases of other neuroendocrine-based disorders,
CC such as Parkinson's disease, athyrotic cretinism and Addison's disease.
CC The method uses engineered, immortalised cells that are available in
CC large amounts, with a stable and predictable phenotype. They allow
CC screening to be performed in vivo. The present sequence represents a
CC somatostatin peptide hormone SS-28 used in an example from the present
CC invention.
xx

SQ Sequence 28 AA;
Query Match 71.4%; Score 105; DB 20; Length 28;
Best Local Similarity 81.0%; Pred. No. 1.1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFYWKGTSC 25
Db : ||||| ||||| ||||| |||||
8 MAPRRKAGCKNFFWKFTSC 28

RESULT 13
AAY24239
ID AAY24239 standard; peptide; 28 AA.
XX AC AAY24239;
AC
XX
DT 15-SEP-1999 (first entry)
XX
XX Peptide hormone somatostatin SS-28.
DE
XX
KW Glucagon-like peptide I receptor; GLP-1; regulation; secretion;
KW neuroendocrine cell line; glycaemic sensing mechanism; glucose;
KW genetic engineering; hypoglycaemia; diabetes.
XX
XX Synthetic.
OS
XX WO9935255-A2.
PN
XX
XX 15-JUL-1999.
PD
XX
PF 11-JAN-1999; 99WO-US00631.
XX
XX 03-JUN-1998; 98US-0087848.
PR 12-JAN-1998; 98US-0071193.
PR 12-JAN-1998; 98US-0071209.
PR 12-JAN-1998; 98US-0072556.
PR 03-JUN-1998; 98US-0087821.
XX (BETA-) BETAGENE INC.
PA
XX Clark SA, Thigpen AE;
PI WPI; 1999-419351/35.
XX
XX New immortalized neuroendocrine cells that stably secrete
PT polypeptide, particularly used to treat diabetes and hypoglycaemia
PT
XX Example 8; Page 148; 318pp; English.
PS
XX

CC The present invention describes immortalized neuroendocrine cells (A)
CC that stably secrete a polypeptide hormone (I) contain an expression
CC region that includes a transgene (TG), linked to a promoter functional
CC in eukaryotic cells, such that expression of TG increases sensitivity
CC of the cells to a modulator of (I) secretion. (A) are specifically
CC used, by transplantation, to treat diabetes or hypoglycaemia (especially
CC where associated with insulin therapy) but more generally are used to
CC express, in vivo, a wide range of therapeutic hormones, enzymes,
CC amidated proteins and growth factors. Also engineered neuroendocrine
CC cells are used to identify new therapeutic agents or drug targets.
CC (A) have a stable phenotype and particularly inducible glucagon
CC secretion and glucose counter-regulatory capacities, i.e. they balance
CC the hyperglycaemic effects of beta-cell loss and the hypoglycaemic

CC effects of administered insulin. Since they are of human origin, they
CC are less likely to suffer immune rejection than xenografts. The present
CC sequence represents the peptide hormone somatostatin SS-28 used in an
CC example from the present invention.

XX SQ Sequence 28 AA;
Query Match 71.4%; Score 105; DB 20; Length 28;
Best Local Similarity 81.0%; Pred. No. 1.1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

OY 5 LPPRRKAGCKNFYWKGTSC 25
Db 8 MAPRRKAGCKNFYWKGTSC 28

RESULT 14
AAB91018
ID AAB91018 standard; Peptide; 28 AA.

XX AAB91018;

DT 22-JUN-2001 (first entry)

XX Somatostatin related peptide SEQ ID NO:192.

XX Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW blood component; modification; succinimide; maleimide group; amino;
KW hydroxyl; thiol; hormone; growth factor; neurotransmitter.

XX Homo sapiens.
OS Synthetic.

XX WO200069900-A2.

XX 23-NOV-2000.

XX 17-MAY-2000; 2000WO-US13576.

XX 17-MAY-1999; 99US-0134406.

XX 10-SEP-1999; 99US-0153406.

XX 15-OCT-1999; 99US-0159783.

XX (CONJ-) CONJUCHEM INC.

XX Bridon DP, Ezrin AM, Milner PG, Holmes DL, Thibaudau K;

XX WPI; 2001-112059/12.

XX Modifying and attaching therapeutic peptides to albumin prevents
XX peptidase degradation, useful for increasing length of in vivo activity

XX Disclosure; Page 252; 733pp; English.

XX The present invention describes a modified therapeutic peptide (I)
XX comprising a therapeutically active amino acid region (III) and a
XX reactive group (II) (e.g. succinimide and maleimide groups) attached to
XX a less therapeutically active amino acid region (IV), which covalently
XX bonds with amino/hydroxyl/thiol groups on blood components to form a
XX peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
XX (I) are useful for modifying therapeutic peptides e.g. hormones, growth
XX factors and neurotransmitters, to protect them from peptidase activity
XX in vivo for the treatment of various disorders. Endogenous therapeutic
XX peptides are not suitable as drug candidates as they require frequent
XX administration due to rapid degradation by peptidases in the body.
XX Modifying and attaching therapeutic peptides to albumin prevents or
XX reduces the action of peptidases to increase length of activity (half
XX life) and specificity as bonding to large molecules decreases
XX intracellular uptake and interference with physiological processes.
XX AAB90829 to AAB92441 represent peptides which can be used in the
XX exemplification of the present invention.

XX SQ Sequence 28 AA;

Query Match 71.4%; Score 105; DB 22; Length 28;
Best Local Similarity 81.0%; Pred. No. 1.1e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

OY 5 LPPRRKAGCKNFYWKGTSC 25
Db 8 MAPRRKAGCKNFYWKGTSC 28

RESULT 15
AAU07669
ID AAU07669 standard; Peptide; 28 AA.

XX AAU07669;

XX 04-DEC-2001 (first entry)

DE Mammalian somatostatin 28 (SS-28) peptide sequence.

XX Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I;
KW PPSS-II'; PPSS-II'; endocrine tumour; pituitary gland; glucagonoma; AIDS;
KW gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus;
KW carcinoid syndrome; cell proliferation; apoptosis; growth hormone; SS-28;
KW glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV;
KW epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective;
KW neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic;
KW anti-human immunodeficiency virus; osteopathic; anticonvulsant.

XX Mammalia sp.

XX CA2325169-A1.

XX 03-JUN-2001.

XX 01-DEC-2000; 2000CA-2325169.

XX 03-DEC-1999; 99US-0168934.

XX (NDSU-) NDSU RES FOUND.

XX Sheridan MA, Moore CA, Kittelson JD;

XX WPI; 2001-425997/46.

XX New somatostatin polypeptides derived from Oncorhynchus mykiss, useful
XX for treating diabetes mellitus, acromegaly, gastrinoma, acquired
XX immunodeficiency syndrome and neurological disorders -

XX Example 5; Fig 6; 52pp; English.

XX The invention relates to an Oncorhynchus mykiss somatostatin polypeptide
XX containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of
XX preprosomatostatin II (PPSS-II). The protein sequences and their
XX associated polynucleotides are useful for identifying modified
XX somatostatin polypeptide which functions as a somatostatin agonist useful
XX for research, therapeutics or diagnostics, including medical and
XX veterinary applications. The wild-type somatostatin and its modified
XX version are useful for treating hypersecretion from endocrine tumours in
XX the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g.
XX gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage
XX through their effects on cell proliferation and apoptosis and as adjuncts
XX in the treatment of diabetes mellitus via inhibition of growth hormone
XX and glucagon. In addition, dysfunctional somatostatin secretion is
XX associated with acquired immunodeficiency syndrome (AIDS) and various
XX neurological disorders (e.g. epilepsy, Alzheimer's disease and
XX Huntington's disease) and somatostatin antagonists are effective in the
XX treatment of such conditions. Nucleic acids encoding the polypeptides are
XX useful in gene therapy and fusion peptides can be targeted to neoplasms
XX and their metastases, inhibiting the release of their secretory products.
XX This sequence represents the mammalian somatostatin 28 (SS-28) peptide.

SQ Sequence 28 AA;
Query Match 71.4%; Score 105; DB 22; Length 28;
Best Local Similarity 81.0%; Pred. NO. 1.le-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRERKAGCKNFWKGTSC 25
: ||||| ||||| |||||
Db 8 MAPRERKAGCKNFWKGTSC 28

Search completed: August 13, 2003, 14:50:59
Job time: 46.7949 secs

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OM protein - protein search, using sw model
Run on: August 13, 2003, 14:49:47 ; Search time 24.359 seconds
(without alignments)
134.451 Million cell updates/sec

Title: US-09-727-739B-16
Perfect score: 147
Sequence: 1 SVDNLPKPKAGCKNFYKGTSC 25

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 492763 seqs, 131003257 residues
Total number of hits satisfying chosen parameters: 492763

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :				Published Applications AA:*			
1:	/cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*	110	9	US-09-766-396-3	112	14	US-10-062-375-2
2:	/cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*	110	14	US-09-766-396-11	29	9	US-09-766-396-11
3:	/cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*	110	14	US-10-062-375-11	29	14	US-10-062-375-11
4:	/cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*	200	14	US-09-766-396-10	84	9	US-09-766-396-10
5:	/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*	15	14	US-10-062-375-10	109	14	US-09-766-396-5
6:	/cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*	14	10	US-10-062-375-5	109	14	US-10-062-375-5
7:	/cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*	14	12	US-10-197-954-41	105	9	US-10-197-954-41
8:	/cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*	14	12	US-09-766-396-26	105	12	US-10-335-125-2
9:	/cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep.*	14	14	US-10-062-375-26	105	14	US-10-062-375-26
10:	/cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep.*	29	9	US-10-137-870-380	155	12	US-10-137-870-380
11:	/cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*	29	14	US-10-140-018-380	155	12	US-10-140-018-380
12:	/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*	85	9	US-10-140-021-380	155	12	US-10-140-021-380
13:	/cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*	85	14	US-10-140-274-380	155	12	US-10-140-274-380
14:	/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*	112	9	US-10-140-471-380	155	12	US-10-140-471-380
15:	/cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*	112	12	US-10-140-807-380	155	12	US-10-140-807-380
16:	/cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*	112	12	US-10-140-922-380	155	12	US-10-140-922-380
17:	/cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*	112	12	US-10-140-924-380	155	12	US-10-140-924-380
18:	/cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*	112	12	US-10-140-926-380	155	12	US-10-140-926-380

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	105	71.4	110	9	US-09-766-396-3
2	105	71.4	110	14	US-10-062-375-3
3	105	71.4	140	9	US-09-280-030-64
4	83	56.5	200	14	US-10-101-487-53
5	78	53.1	15	14	US-10-101-487-52
6	77	52.4	14	10	US-09-316-505-2
7	77	52.4	14	12	US-10-224-640-2
8	77	52.4	14	12	US-10-251-703-18
9	77	52.4	14	14	US-10-101-487-37
10	77	52.4	29	9	US-09-766-396-7
11	77	52.4	29	14	US-10-062-375-7
12	77	52.4	85	9	US-09-766-396-6
13	77	52.4	85	14	US-10-062-375-6
14	77	52.4	112	9	US-09-766-396-2
15	77	52.4	112	12	US-10-335-125-3

16	77	52.4	112	14	US-10-062-375-2	Sequence 2, Appl
17	74	50.3	29	9	US-09-766-396-11	Sequence 11, Appl
18	74	50.3	29	14	US-10-062-375-11	Sequence 11, Appl
19	74	50.3	84	9	US-09-766-396-10	Sequence 10, Appl
20	74	50.3	84	14	US-10-062-375-10	Sequence 10, Appl
21	74	50.3	109	9	US-09-766-396-5	Sequence 5, Appl
22	74	50.3	109	14	US-10-062-375-5	Sequence 5, Appl
23	65	44.2	29	15	US-10-197-954-41	Sequence 41, Appl
24	65	44.2	105	9	US-09-766-396-26	Sequence 2, Appl
25	65	44.2	105	12	US-10-335-125-2	Sequence 26, Appl
26	65	44.2	105	14	US-10-062-375-26	Sequence 380, App
27	65	44.2	155	12	US-10-137-870-380	Sequence 380, App
28	65	44.2	155	12	US-10-140-018-380	Sequence 380, App
29	65	44.2	155	12	US-10-140-021-380	Sequence 380, App
30	65	44.2	155	12	US-10-140-274-380	Sequence 380, App
31	65	44.2	155	12	US-10-140-471-380	Sequence 380, App
32	65	44.2	155	12	US-10-140-807-380	Sequence 380, App
33	65	44.2	155	12	US-10-140-922-380	Sequence 380, App
34	65	44.2	155	12	US-10-140-924-380	Sequence 380, App
35	65	44.2	155	12	US-10-140-926-380	Sequence 380, App
36	65	44.2	155	12	US-10-141-698-380	Sequence 380, App
37	65	44.2	155	12	US-10-141-702-380	Sequence 380, App
38	65	44.2	155	12	US-10-141-704-380	Sequence 380, App
39	65	44.2	155	12	US-10-142-421-380	Sequence 380, App
40	65	44.2	155	12	US-10-142-432-380	Sequence 380, App
41	65	44.2	155	12	US-10-142-767-380	Sequence 380, App
42	65	44.2	155	12	US-10-143-033-380	Sequence 380, App
43	65	44.2	155	12	US-10-144-994-380	Sequence 380, App
44	65	44.2	155	12	US-10-145-628-380	Sequence 380, App
45	65	44.2	155	12	US-10-145-631-380	Sequence 380, App

ALIGNMENTS

RESULT 1
US-09-766-396-3
Sequence 3, Application US/09766396
Patent No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES, COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-766-396-3

Query Match 71.4%; Score 105; DB 9; Length 110;
Best Local Similarity 81.0%; Pred. No. 5.4e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFFWKFTSC 25
Db 90 MAPRRKAGCKNFFWKFTSC 110

RESULT 2

US-10-062-375-3
Sequence 3, Application US/10062375
Publication No. US20020133000A1
GENERAL INFORMATION:

APPLICANT: Sutcliffe, Gregor J.

de Lecea, Luis

Siggins, George R.

Henriksen, Steven J.

TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,

COMPOSITIONS AND METHODS

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE

STREET: 10666 No. US20020133000Alth Torrey Pines Road, TPC-8

CITY: La Jolla

STATE: California

COUNTRY: US

ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA: US/10/062,375

APPLICATION NUMBER: US/10/062,375

FILING DATE: 30-Jan-2002

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/857,389

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Schmonsees, William

REGISTRATION NUMBER: 31,796

REFERENCE/DOCKET NUMBER: 22908-0002

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 324-7041

TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 110 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO: 3:

US-10-062-375-3

Query Match 71.4%; Score 105; DB 14; Length 110;
Best Local Similarity 81.0%; Pred. No. 5.4e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFFWKFTSC 25
: |||||

Db 90 MAPRRKAGCKNFFWKFTSC 110

RESULT 3

US-09-280-030-64
Sequence 64, Application US/092800030A
Patent No. US20010021515A1
GENERAL INFORMATION:

APPLICANT: Sato, Seiji

APPLICANT: Higashikuni, Naohiko

APPLICANT: Kudo, Toshiyuki

APPLICANT: Kondo, Masaaki

TITLE OF INVENTION: DNAS ENCODING NEW FUSION PROTEINS AND PROCESSES FOR

TITLE OF INVENTION: PREPARING USEFUL POLYPEPTIDES THROUGH EXPRESSION OF THE

TITLE OF INVENTION: DNAS

FILE REFERENCE: 382.1026

CURRENT APPLICATION NUMBER: US/09/280,030A

CURRENT FILING DATE: 1999-03-26

EARLIER APPLICATION NUMBER: JP10-87339/1998

EARLIER FILING DATE: 1998-03-31

NUMBER OF SEQ ID NOS: 66

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 64

LENGTH: 140

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Designated is

OTHER INFORMATION: an amino acid sequence of

OTHER INFORMATION: MWpmp20-(His)6-EGF-TEV-Somatostatin 28

US-09-280-030-64

Query Match 71.4%; Score 105; DB 9; Length 140;
Best Local Similarity 81.0%; Pred. No. 6.9e-08;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFFWKFTSC 25
: |||||

Db 120 MAPRRKAGCKNFFWKFTSC 140

RESULT 4

US-10-101-487-53
Sequence 53, Application US/10101487
Publication No. US20020169125A1
GENERAL INFORMATION:

APPLICANT: LEUNG, DAVID W.

APPLICANT: BERGMAN, PHILIP A.

APPLICANT: LOFQUIST, ALAN

APPLICANT: PIETZ, GREGORY E.

APPLICANT: TOMPKINS, CHRISTOPHER K.

APPLICANT: WAGGONER JR., DAVID W.

TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES

TITLE OF INVENTION: THEREOF

FILE REFERENCE: 077319/0329

CURRENT APPLICATION NUMBER: US/10/101,487

CURRENT FILING DATE: 2002-03-20

PRIOR APPLICATION NUMBER: 60/277,705

PRIOR FILING DATE: 2001-03-21

NUMBER OF SEQ ID NOS: 116

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 53

LENGTH: 200

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Synthetic fusion

OTHER INFORMATION: protein

US-10-101-487-53

Query Match 56.5%; Score 83; DB 14; Length 200;
Best Local Similarity 76.5%; Pred. No. 0.00017;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 9 ERKAGCKNFYWKGTSC 25
| :|||||:||||
Db 184 EEEAGCKNFFWKFTSC 200

RESULT 5
US-10-101-487-52
; Sequence 52, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
; APPLICANT: BERGMAN, PHILIP A.
; APPLICANT: LOFQUIST, ALAN
; APPLICANT: PIETZ, GREGORY E.
; APPLICANT: TOMPKINS, CHRISTOPHER K.
; APPLICANT: WAGGONER JR., DAVID W.
; TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: 60/277,705
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 52
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
US-10-101-487-52

Query Match 53.1%; Score 78; DB 14; Length 15;
Best Local Similarity 80.0%; Pred. No. 6.8e-05;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 11 KAGCKNFYWKGTSC 25
:|||||:||||
Db 1 EAGCKNFFWKFTSC 15

RESULT 6
US-09-316-505-2
; Sequence 2, Application US/09316505
; Patent No. US20020111461A1
; GENERAL INFORMATION:
; APPLICANT: Burnier, John P.
; APPLICANT: Clark, Ross G.
; APPLICANT: Elias, Kathleen A.
; APPLICANT: McDowell, Robert S.
; APPLICANT: Rawson, Thomas E.
; APPLICANT: Somers, Todd C.
; APPLICANT: Stanley, Mark S.
; TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GROWTH HORMONE SECRETAGOGUES
; FILE REFERENCE: P0850D2
; CURRENT APPLICATION NUMBER: US/09/316,505
; CURRENT FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: US 09/057,074
; PRIOR FILING DATE: 1998-04-08
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Homosapiens
US-09-316-505-2

Query Match 52.4%; Score 77; DB 10; Length 14;
Best Local Similarity 85.7%; Pred. No. 9e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 12 AGCKNFYWKGTSC 25

Db 1 AGCKNFFWKFTSC 14
|||||:||||

RESULT 7
US-10-224-640-2
; Sequence 2, Application US/10224640
; Publication No. US20030139348A1
; GENERAL INFORMATION:
; APPLICANT: Burnier, John P.
; APPLICANT: Clark, Ross G.
; APPLICANT: Elias, Kathleen A.
; APPLICANT: McDowell, Robert S.
; APPLICANT: Rawson, Thomas E.
; APPLICANT: Somers, Todd C.
; APPLICANT: Stanley, Mark S.
; TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GROWTH HORMONE SECRETAGOGUES
; FILE REFERENCE: P0850D2C1
; CURRENT APPLICATION NUMBER: US/10/224,640
; CURRENT FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 09/057,074
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: US 08/340,767
; PRIOR FILING DATE: 1994-11-16
; PRIOR APPLICATION NUMBER: US 09/316,505
; PRIOR FILING DATE: 1999-05-21
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Homosapiens
US-10-224-640-2

Query Match 52.4%; Score 77; DB 12; Length 14;
Best Local Similarity 85.7%; Pred. No. 9e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 12 AGCKNFYWKGTSC 25
|||||:||||
Db 1 AGCKNFFWKFTSC 14

RESULT 8
US-10-251-703-18
; Sequence 18, Application US/10251703
; Publication No. US20030148449A1
; GENERAL INFORMATION:
; APPLICANT: Kuliopulos, Athan
; APPLICANT: Covic, Lidija
; TITLE OF INVENTION: G Protein Coupled Receptor Agonists and Antagonists and
; TITLE OF INVENTION: Methods of Activating and Inhibiting G Protein Coupled
; TITLE OF INVENTION: Receptors Using the Same
; FILE REFERENCE: NEMC-215 CIP
; CURRENT APPLICATION NUMBER: US/10/251,703
; CURRENT FILING DATE: 2002-09-20
; PRIOR APPLICATION NUMBER: 09/841,091
; PRIOR FILING DATE: 2001-04-23
; PRIOR APPLICATION NUMBER: 60/198,993
; PRIOR FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Extracellular
US-10-251-703-18

Query Match 52.4%; Score 77; DB 12; Length 14;
Best Local Similarity 85.7%; Pred. No. 9e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY	12	AGCKNFYWKGTSC	25
		:	
Db	1	AGCKNFFWKTFSC	14

RESULT 9

US-10-101-487-37
; Sequence 37, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
; APPLICANT: BERGMAN, PHILIP A.
; APPLICANT: LOFQUIST, ALAN
; APPLICANT: PIETZ, GREGORY E.
; APPLICANT: TOMPKINS, CHRISTOPHER K.
; APPLICANT: WAGGONER JR., DAVID W.
; TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: 60/277,705
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO. 37
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Recognition
; OTHER INFORMATION: motif
US-10-101-487-37

```
Query Match      52.4%; Score 77; DB 14; Length 14;
Best Local Similarity 85.7%; Pred. No. 9e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

QY	12	AGCKNFYWKGTSC	25
		:	
Db	1	AGCKNEFWKFTSC	14

RESULT 10

US-09-766-396-7
; Sequence 7, Application US/09766396
; Patent No. US20020013456A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; de Lecea, Luis
; Siggins, George R.
; Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 NO. US20020013456A1th Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/766,396
; FILING DATE: 18-Jan-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-062-375-7

Query Match 52.4%; Score 77; DB 14; Length 29;
Best Local Similarity 60.0%; Pred. No. 0.00019;
Matches 12; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 6 PPRKAGCKNFYWKFTSC 25
|| | ||||| |:
Db 9 PPHRDKKPKCNFFWKTSSC 28

RESULT 12

US-09-766-396-6
; Sequence 6, Application US/09766396
; Patent No. US20020013456A1

GENERAL INFORMATION:

APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.

TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09766,396

FILING DATE: 18-Jan-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/857,389

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002

TELEPHONE: (415) 324-7041

TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 85 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-09-766-396-6

Query Match

Best Local Similarity 52.4%; Score 77; DB 9; Length 85;
Matches 12; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 6 PPRKAGCKNFYWKFTSC 25
|| | ||||| |:
Db 65 PPHRDKKPKCNFFWKTSSC 84

RESULT 13

US-10-062-375-6
; Sequence 6, Application US/10062375
; Publication No. US20020133000A1

GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020133000A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/062,375
FILING DATE: 30-Jan-2002
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/857,389

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002

TELEPHONE: (415) 324-7041

TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 85 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-10-062-375-6

Query Match 52.4%; Score 77; DB 14; Length 85;
Best Local Similarity 60.0%; Pred. No. 0.00054;
Matches 12; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 6 PPRKAGCKNFYWKFTSC 25
|| | ||||| |:
Db 65 PPHRDKKPKCNFFWKTSSC 84

RESULT 14

US-09-766-396-2
; Sequence 2, Application US/09766396
; Patent No. US20020013456A1

GENERAL INFORMATION:

APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.

TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-766-396-2

Query Match 52.4%; Score 77; DB 9; Length 112;
Best Local Similarity 60.0%; Pred. No. 0.00071;
Matches 12; Conservative 2; Mismatches 6; Indels 0; Gaps 0;
QY 6 PPRERKAGCKNFYWKGTSC 25
DB 92 PPHRDKKPKCKNFFWKTFSSC 111

RESULT 15
US-10-335-125-3
Sequence 3, Application US/10335125
Publication No. US20030148355A1
GENERAL INFORMATION:
APPLICANT: Olsen, Henrik S.
TITLE OF INVENTION: CORTISTATIN POLYPEPTIDES
FILE REFERENCE: 1488.0430003
CURRENT APPLICATION NUMBER: US/10/335,125
CURRENT FILING DATE: 2003-01-02
PRIOR APPLICATION NUMBER: US/09/775,827A
PRIOR FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 09/001,472
PRIOR FILING DATE: 1997-12-31
PRIOR APPLICATION NUMBER: US 60/037,386
PRIOR FILING DATE: 1997-02-07
PRIOR APPLICATION NUMBER: US 60/033,980
PRIOR FILING DATE: 1996-12-31
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PatentIn version 3.0
SEQ ID NO 3
LENGTH: 112
TYPE: PRT
ORGANISM: Rat Cortistatin
US-10-335-125-3

Query Match 52.4%; Score 77; DB 12; Length 112;
Best Local Similarity 60.0%; Pred. No. 0.00071;
Matches 12; Conservative 2; Mismatches 6; Indels 0; Gaps 0;
QY 6 PPRERKAGCKNFYWKGTSC 25
DB 92 PPHRDKKPKCKNFFWKTFSSC 111

Search completed: August 13, 2003, 14:53:43

Job time : 25.359 secs

RESULT 7

RIIDS1

somatostatin-14 precursor - channel catfish
N:Alternate names: somatostatin I
N:Contains: somatostatin-14
C:Species: Ictalurus punctatus (channel catfish)
C:Date: 30-Jun-1980 #sequence_revision 31-Dec-1993 #text_change 18-Jun-1999
C:Accession: S00292; A93897; A92334; A01435
R:Minth, C.D.; Taylor, W.L.; Magazin, M.; Tavianini, M.A.; Collier, K.; Weith, H.L.; Dixon, J. Biol. Chem. 257, 10372-10377, 1982
A:Title: The structure of cloned DNA complementary to catfish pancreatic somatostatin-14
A:Reference number: S00292; MUID:82265698; PMID:6179939
A:Accession: S00292
A:Molecule type: mRNA
I:Residues: 1-114 <MIN>
A:Cross-references: EMBL:V00607; NID:964017; PIDN:CAA23877.1; PID:964018
R:Taylor, W.L.; Collier, K.J.; Deschenes, R.J.; Weith, H.L.; Dixon, J.E.
Proc. Natl. Acad. Sci. U.S.A. 78, 6694-6698, 1981
A:Title: Sequence analysis of a cDNA coding for a pancreatic precursor to somatostatin.
A:Reference number: A93897; MUID:82082515; PMID:6171821

Query Match 72.8%; Score 107; DB 1; Length 114;
Best Local Similarity 85.7%; Pred. No. 1.1e-08;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY
5 LPPRERKAGCKNFYWKGFTSC 25
| | | | | : | | | |
Db
94 LAPRERKAGCKNFFWKFTTSC 114

RESULT 8

I50798

preprosomatostatin SS-14 - channel catfish
C:Species: Ictalurus punctatus (channel catfish)
C:Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C:Accession: I50798
R:Dixon, J.E.; Andrews, P.C.
Adv. Exp. Med. Biol. 188, 19-29, 1985
A:Title: Somatostatins of the channel catfish.
A:Reference number: I50798; MUID:85303576; PMID:2863931
A:Accession: I50798
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-114 <DIX>
A:Cross-references: GB:M25903; NID:g213339; PIDN:AAA49339.1; PID:g213340
C:Superfamily: somatostatin

Query Match 72.8%; Score 107; DB 2; Length 114;
Best Local Similarity 85.7%; Pred. NO. 1.1e-08;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0.

QY	5	LPRERKAGCKNFYWKGTSC	25
		11111111111111111111	
Db	94	LAPRERKAGCKNFYWKGTSC	114

RESULT 9

JC6166

somatostatin-14 precursor - laughing frog
 N;Alternate names: PSS1 protein
 C;Species: Rana ridibunda (laughing frog)
 C;Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 16-Jul-1999
 C;Accession: JC6166
 R;Tostivint, H.; Lihmann, I.; Bucharles, C.; Vieau, D.; Coulouarn, Y.; Fournier, A
 Proc. Natl. Acad. Sci. U.S.A. 93, 12605-12610, 1996
 A;Title: Occurrence of two somatostatin variants in the frog brain: Characterization
 A;Reference number: JC6166; MUID:97057290; PMID:8901629
 A;Contents: brain
 A;Accession: JC6166
 A;Molecule type: mRNA
 A;Residues: 1-115 <TOS>
 A;Cross-references: GB:U68136; NID:G1890650; PIDN:RAC60093.1; PID:G1890651
 C;Comment: This protein acts both as a neurotransmitter/neuromodulator and a hormone
 C;Genetics:
 A;Gene: pss1
 C;Superfamily: somatostatin
 C;Keywords: brain; hormone

Query Match	72.8%	Score 107;	DB 2;	Length 115;
Best Local Similarity	85.7%	Pred. No. 1.1e-08;		
Matches 18; Conservative	1;	Mismatches 2;	Indels 0;	Gaps 0;

QY . 5 LPPRERKAGCKNFYWKGFTSC 25
| | | | | : | | |
Db . 95 LAPRERKAGCKNFFWKFTTSC 115

RESULT 10

K230PI
S20630

somatostatin precursor - chicken
 C:Species: Gallus gallus (chicken)
 C:Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
 C:Accession: S20630
 R:Nata, K.; Kobayashi, T.; Karahashi, K.; Kato, S.; Yamamoto, H.; Yonekura, H.; Okam
 submitted to the EMBL Data Library, June 1991
 A:Description: Nucleotide sequence determination of chicken somatostatin precursor c
 A:Reference number: S20630
 A:Accession: S20630
 A>Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-116 <NAT>
 A:Cross-references: EMBL:X60191; NID:g62985; PIDN:CAA42747.1; PID:g62986
 C:Superfamily: somatostatatin

Query Match 72.8%; Score 107; DB 1; Length 116;
Best Local Similarity 85.7%; Pred. No. 1.2e-08;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY	5	LPPRERKAGCKNFYWKGTSC	25
		- - - - -	- - - - -
D6	96	LAPRERKAGCKNFFWKFTSC	116

RESULT 17

RIATEST RESULTS

somatostatin I precursor - American goosefish
 N:Contains: somatostatin I
 C:Species: Lopholius americanus (American goosefish)
 C:Date: 31-Mar-1981 #sequence_revision.31-Mar-1981 #text_change 28-May-1999
 C:Accession: A93236; A93860; A91087; A01433
 R:Hobart, P.; Crawford, R.; Shen, L.; Pictet, R.; Rutter, W.J.
 Nature 288, 137-141, 1980
 A:Title: Cloning and sequence analysis of cDNAs encoding two distinct somatostatin I precursors from the American goosefish, *Lopholius americanus*.
 A:Reference number: A93236; MUID:81052423; PMID:6107860
 A:Accession: A93236
 A:Molecule type: mRNA
 A:Residues: 1-121 <HOB>

Query Match

Query Match
Best Local

Best Local :
Matches 1

Matches

33

Ar 5

91

96 90

N:Contains: somatostatin.14 (SS-14); somatostatin 28 (SS-28)

C:Species: Homo sapiens (man)

C:Date: 17-Dec-1982 #sequence_revision 17-Dec-1982 #text_change 18-Jun-1999

C:Accession: A43614; A01430; S09381; S50024

R:Shen, L.P.; Rutter, W.J.

Science 224, 168-171, 1984

A:Title: Sequence of the human somatostatin I gene.

A:Reference number: A43614; MUID:84146798; PMID:6142531

A:Accession: A43614

A:Molecule type: DNA

A:Residues: 1-116 <SH2>

A:Cross-references: GB:J00306; NID:G338287; PIDN:AAA60566.1; PID:G338288

R:Shen, L.P.; Pictet, R.L.; Rutter, W.J.

Proc. Natl. Acad. Sci. U.S.A. 79, 4575-4579, 1982

A:Title: Human somatostatin I: sequence of the cDNA.

A:Reference number: A01430; MUID:83014931; PMID:6126875

A:Accession: A01430

A:Molecule type: mRNA

A:Residues: 1-116 <SHE>

A:Cross-references: GB:J00306; NID:G338287; PIDN:AAA60566.1; PID:G338288

A:Experimental source: pancreatic somatostatinoma

R:Gomez, S.; Boileau, G.; Zollinger, L.; Nault, C.; Rholam, M.; Cohen, P.

EMBO J. 8, 2911-2916, 1989

A:Title: Site-specific mutagenesis identifies amino acid residues critical in prohormone

A:Reference number: S09381; MUID:90059875; PMID:2573512

A:Accession: S09381

A>Status: preliminary

A:Molecule type: mRNA

A:Residues: 88-108 <GOM>

R:Odum, L.; Johnsen, A.H.

Biochem. J. 303, 263-268, 1994

A:Title: Human seminal plasma contains somatostatin-64.

A:Reference number: S50024; MUID:95031969; PMID:7945250

A:Accession: S50024

A>Status: preliminary

A:Molecule type: protein

A:Residues: 53-62; 67-82 <ODU>

C:Comment: Somatostatin inhibits the release of somatotropin.

C:Genetics:

A:Gene: GDB:SST

A:Cross-references: GDB:119604; OMIM:182450

A:Map position: 3q28-3q28

A:Introns: 46/3

C:Function:

A:Description: inhibits the secretion of a number of peptide hormones, including somatot

;Superfamily: somatostatin

C:Keywords: hormone; hypothalamus; neuropeptide

F:1-24/Domain: signal sequence #status predicted <SIG>

F:25-88/Domain: propeptide #status predicted <PRO>

F:89-116/Product: somatostatin-28 #status predicted <M28>

F:103-116/Product: somatostatin-14 #status predicted <M14>

F:105-116/Disulfide bonds: #status experimental

Query Match

71.4%; Score 105; DB 1; Length 116;

Best Local Similarity

81.0%; Pred. No. 2.3e-08;

Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRERKAGCKNFYWKFTSC 25

: |||||

Db 96 MAPRERKAGCKNFYWKFTSC 116

RESULT 15

A28968

somatostatin I precursor - crab-eating macaque

N:Alternate names: preprosomatostatin

C:Species: Macaca fascicularis (crab-eating macaque)

C:Date: 30-Jun-1989 #sequence_revision 31-Jan-1997 #text_change 18-Jun-1999

C:Accession: A28968

R:Travis, G.H.; Sutcliffe, J.G.

Proc. Natl. Acad. Sci. U.S.A. 85, 1696-1700, 1988

A:Title: Phenol emulsion-enhanced DNA-driven subtractive cDNA cloning: isolation of low-

A:Reference number: A28968; MUID:88144503; PMID:2894033

A:Accession: A28968

A:Molecule type: mRNA

A:Residues: 1-116 <TRA>

A:Cross-references: GB:M19318; NID:G342298; PIDN:AAA36908.1; PID:G342299

C:Comment: Somatostatin inhibits the release of somatotropin.

C:Superfamily: somatostatin

C:Keywords: hormone; neuropeptide

F:1-24/Domain: signal sequence #status predicted <SIG>

F:25-88/Domain: propeptide #status predicted <PRO>

F:89-116/Product: somatostatin-28 #status predicted <M28>

F:103-116/Product: somatostatin-14 #status predicted <M14>

F:105-116/Disulfide bonds: #status predicted

Query Match

71.4%; Score 105; DB 1; Length 116;

Best Local Similarity

81.0%; Pred. No. 2.3e-08;

Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRERKAGCKNFYWKFTSC 25

: |||||

Db 96 MAPRERKAGCKNFYWKFTSC 116

Search completed: August 13, 2003, 14:51:52

Job time : 17.0256 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:47:17 ; Search time 9.61539 Seconds
(without alignments)
122.269 Million cell updates/sec

Title: US-09-727-739B-16
Perfect score: 147
Sequence: 1 SVDNLPFRKAGCKNFYWKGTSC 25

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES.

Result No.	Score	Match	Length	DB ID	Description
1	138	93.9	125	1 SMS2_LOPAM	P01170 lophius ame
2	134	91.2	73	1 SMS2_PLAFA	P21780 platichthys
3	134	91.2	115	1 SMS2_ONCMY	Q91194 oncorhynchu
4	123.5	84.0	74	1 SMS2_MYOSC	P09876 myoxocephal
5	121	82.3	28	1 SMS2_ORENI	P81029 oreochromis
6	110	74.8	120	1 SMS2_CARAU	Q9ygh4 carassius a
7	107	72.8	26	1 SMS1_AMICA	Q9prz6 amia calva
8	107	72.8	114	1 SMS1_ICTPU	P01171 ictalurus p
9	107	72.8	114	1 SMSA_CARAU	Q9ygh5 carassius a
10	107	72.8	115	1 SMS1_RANRI	P87384 rana ridibu
11	107	72.8	116	1 SMS1_CHICK	P33094 gallus gall
12	107	72.8	121	1 SMS1_LOPAM	P01169 lophius ame
13	105	71.4	92	1 SMS_PIG	P01168 sus scrofa
14	105	71.4	116	1 SMS_BOVIN	P26917 bos taurus
15	105	71.4	116	1 SMS_CANFA	P49670 canis famli
16	105	71.4	116	1 SMS_HUMAN	P01166 homo sapien
17	105	71.4	116	1 SMS_MOUSE	P01167 mus musculu
18	105	71.4	116	1 SMS_SHEEP	O46688 ovis aries
19	102	69.4	34	1 SMS_MYXGL	P19209 myxine glut
20	99	67.3	115	1 SMS1_PROAN	Q9w7f0 protopterus
21	97	66.0	109	1 SMS2_PROAN	Q9w7e9 protopterus
22	97	66.0	111	1 SMSB_CARAU	Q9ygh3 carassius a
23	94	63.9	37	1 SMS_PETMA	P21779 petromyzon
24	93	63.3	35	1 SMS_LAMFL	Q9prf0 lampetra fl
25	85.5	58.2	103	1 SMS2_RANRI	P87385 rana ridibu
26	77	52.4	14	1 SMS1_MYOSC	P20750 myoxocephal
27	77	52.4	14	1 SMS_ALIMI	P31885 alligator m
28	77	52.4	112	1 CORT_RAT	Q62949 rattus norv
29	74	50.3	109	1 CORT_MOUSE	P56469 mus musculu
30	65	44.2	105	1 CORT_HUMAN	O00230 homo sapien
31	52	35.4	234	1 RKL_GUITH	O78413 guillardia
32	49	33.3	1054	1 TREA_EMENI	P78617 emer icella
33	48	32.7	105	1 SMS2_ICTPU	P01172 ictalurus p

34	47.5	32.3	372	1	CNTR_HUMAN	P26992 homo sapien
35	47.5	32.3	372	1	CNTR_RAT	Q08406 rattus norv
36	47	32.0	584	1	Y328_CHLPN	Q92810 chlamydia p
37	46	31.3	370	1	YA44_HELPJ	Q92m43 helicobacte
38	45.5	31.0	147	1	YGDK_ECOLI	Q46926 escherichia
39	45	30.6	216	1	LEF2_NPVLD	P36869 lymantria d
40	45	30.6	994	1	ATAT_RANES	Q92105 r sarcoplas
41	45	30.6	1109	1	POL_CAEVC	P33459 caprine art
42	44.5	30.3	518	1	VLL_HPVL4	P36734 human papil
43	44	29.9	236	1	FLGD_BUCAI	P57421 buchnera ap
44	44	29.9	282	1	ESTD_HUMAN	P10768 homo sapien
45	44	29.9	591	1	UL49_EBV	P14347 epstein-bar

ALIGNMENTS

RESULT 1

ID	SMS2_LOPAM	STANDARD;	PRT;	125 AA.
AC	P01170; Q91066;			
DT	21-JUL-1986 (Rel. 01, Created)			
DT	01-OCT-1989 (Rel. 12, Last sequence update)			
DT	16-OCT-2001 (Rel. 40, Last annotation update)			
DE	Somatostatin II precursor [Contains: [Tyr7,Gly10]somatostatin-14].			
OS	Lophius americanus (American goosfish) (Anglerfish)			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;			
OC	Acanthomorpha; Paracanthopterygii; Lophiiformes; Lophiidae; Lophius.			
OX	NCBI_TaxID=8073;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RX	MEDLINE=81052423; PubMed=6107860;			
RA	Hobart P.M., Crawford R., Shen L., Pictet R., Rutter W.J.;			
RT	"Cloning and sequence analysis of cDNAs encoding two distinct			
RT	somatostatin precursors found in the endocrine pancreas of			
RT	anglerfish.";			
RL	Nature 288:137-141(1980).			
RN	[2]			
RP	PARTIAL SEQUENCE, AND HYDROXYLATION.			
RX	MEDLINE=87308304; PubMed=2887572;			
RA	Andrews P.C., Nichols R., Dixon J.E.;			
RT	"Post-translational processing of preprosomatostatin-II examined			
RT	using fast atom bombardment mass spectrometry.";			
RL	J. Biol. Chem. 262:12692-12699(1987).			
CC	-!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.			
CC	-!- SUBCELLULAR LOCATION: Secreted.			
CC	-!- MISCELLANEOUS: SOMATOSTATIN II MAY HAVE A DIFFERENT DEGREE OF			
CC	ACTIVITY OR A DIFFERENT TYPE OF TARGET CELL FROM SOMATOSTATIN I.			
CC	-!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.			
CC	-----			
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CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/			
CC	or send an email to license@isb-sib.ch).			
CC	-----			
DR	EMBL; V00641; CAA23987.1; -			
DR	PIR; B93236; RIAFS2.			
DR	InterPro; IPR004250; Somatostatin.			
DR	Pfam; PF03002; Somatostatin; 1.			
KW	Cleavage on pair of basic residues; Hormone; Signal; Hydroxylation;			
KW	Multigene family.			
FT	SIGNAL 1 24 POTENTIAL.			
FT	PROPEP 25 109			
FT	PEPTIDE 112 125			
FT	DISULFID 114 125			
FT	MOD_RES 120 120			
FT	CONFLICT 77 78			
FT	CONFLICT 90 90			
FT	SEQUENCE 125 AA; 14052 MW; 5E14605D7B9A46FE CRC64;			

Query Match 93.9%; Score 138; DB 1; Length 125;
Best Local Similarity 92.0%; Pred. No. 6.5e-14;
Matches 23; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 SVDNLPERRKAGCKNFYWKGTSC 25
I :|||||
Db 101 STNLPERRKAGCKNFYWKGTSC 125

RESULT 2

SMS2_PLAFE STANDARD; PRT; 73 AA.

AC P21780;
DT 01-MAY-1991 (Rel. 18, Created)
DT 01-MAY-1991 (Rel. 18, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14] (Fragments).
OS Platicthys flesus (European flounder).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
OC Pleuronectoidi; Pleuronectidae; Platicthys.
C NCBI_TaxID=8260;
RN [1]

RP SEQUENCE.

RC TISSUE=Pancreas;
RX MEDLINE=88029486; PubMed=2889597;
RA Conlon J.M., Davis M.S., Falkner S., Thim L.;
RT "Structural characterization of peptides derived from
RT prosomatostatins I and II isolated from the pancreatic islets of two
RT species of teleostean fish: the daddy sculpin and the flounder.";
RL Eur. J. Biochem. 168:647-652(1987).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR; S00169; S00169.

KW Cleavage on pair of basic residues; Hormone; Multigene family.

FT NON_TER 1
FT NON_CONS 10 11
FT NON_CONS 45 46
FT NON_CONS 73
FT PEPTIDE 46 73
FT PEPTIDE 60 73
FT DISULFID 62 73
SQ SEQUENCE 73 AA; 7989 MW; CCCBA6B30DCB29BB CRC64;

Query Match 91.2%; Score 134; DB 1; Length 73;
Best Local Similarity 95.7%; Pred. No. 1.5e-13;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3 DNLPPRRKAGCKNFYWKGTSC 25
I :|||||
Db 51 NNLPPRRKAGCKNFYWKGTSC 73

RESULT 3

SMS2_ONCMY STANDARD; PRT; 115 AA.

AC Q91194;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14].
OS Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
C NCBI_TaxID=8022;
RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95354921; PubMed=7628684;

RA Moore C.A., Kittilson J.D., Dahl S.K., Sheridan M.A.;
RT "Isolation and characterization of a cDNA encoding for
RT preprosomatostatin containing [Tyr7, Gly10]-somatostatin-14 from the
RT endocrine pancreas of rainbow trout, Oncorhynchus mykiss.";
RL Gen. Comp. Endocrinol. 98:253-261(1995).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC
CC EMBL; U32471; AAC59695.1;
DR PIR; I51064; I51064.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal; Multigene family.

FT SIGNAL 1 18 POTENTIAL.
FT PROPEP 19 87 POTENTIAL.
FT PEPTIDE 88 115 [TYR21, GLY24]SOMATOSTATIN-28 (POTENTIAL).
FT PEPTIDE 102 115 [TYR7, GLY10]SOMATOSTATIN-14.
FT DISULFID 104 115 BY SIMILARITY.
SQ SEQUENCE 115 AA; 12963 MW; 520595025FCA6D91 CRC64;

Query Match 91.2%; Score 134; DB 1; Length 115;
Best Local Similarity 95.7%; Pred. No. 2.4e-13;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3 DNLPPRRKAGCKNFYWKGTSC 25
I :|||||
Db 93 NNLPPRRKAGCKNFYWKGTSC 115

RESULT 4

SMS2_MYOSC STANDARD; PRT; 74 AA.

AC P09876;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14] (Fragments).
OS Myoxocephalus scorpius (Shorthorn sculpin) (Daddy sculpin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Scorpaeniformes;
OC Cottoidi; Cottidae; Myoxocephalus.
C NCBI_TaxID=8097;
RN [1]
RP SEQUENCE.
RC TISSUE=Pancreas;
RX MEDLINE=88029486; PubMed=2889597;
RA Conlon J.M., Davis M.S., Falkner S., Thim L.;
RT "Structural characterization of peptides derived from
RT prosomatostatins I and II isolated from the pancreatic islets of two
RT species of teleostean fish: the daddy sculpin and the flounder.";
RL Eur. J. Biochem. 168:647-652(1987).
RN [2]
RP SEQUENCE OF 47-74.
RC TISSUE=Pancreas;
RX MEDLINE=87190954; PubMed=2883025;
RA Cutfield S.M., Carne A., Cutfield J.F.;
RT "The amino-acid sequences of sculpin islet somatostatin-28 and
RT peptide YY.";
RL FEBS Lett. 214:57-61(1987).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

Db 94 LAPRERKAGCKNFWKFTTSC 114
RESULT 10
SMSL_RANRI STANDARD; PRT; 115 AA.
AC P87384; Q9PSI8;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin 1 precursor (PSSI) [Contains: Somatostatin-14 (S-I) (SSSI)]
OS Rana ridibunda (Laughing frog) (Marsh frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Rana.
OX NCBI_TaxID=8406;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=97057290; PubMed=8901629;
RA Testivint H., Lihrmann I., Bucharies C., Vieau D., Coulouarn Y.,
RA Fournier A., Conlon J.M., Vaudry H.;
RT "Occurrence of two somatostatin variants in the frog brain:
RT characterization of the cDNAs, distribution of the mRNAs, and
RT receptor-binding affinities of the peptides."
RL Proc. Natl. Acad. Sci. U.S.A. 93:12605-12610(1996).
RN [2]
RP SEQUENCE OF 102-115.
RC TISSUE=Brain;
RX MEDLINE=93038702; PubMed=1358069;
RA Vaudry H., Chartrel N., Conlon J.M.;
RT "Isolation of [Pro2,Met13]somatostatin-14 and somatostatin-14 from the
RT frog brain reveals the existence of a somatostatin gene family in a
RT tetrapod."
RL Biochem. Biophys. Res. Commun. 188:477-482(1992).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC EMBL; U68136; AAC60093.1;
CC PIR; JC6166; JC6166.
CC InterPro; IPR004250; Somatostatin.
CC Pfam; PF03002; Somatostatin; 1.
CC Cleavage on pair of basic residues; Hormone; Multigene family; Signal.
CC SIGNAL 1 24 BY SIMILARITY.
CC PROPEP 25 99 BY SIMILARITY.
CC PEPTIDE 102 115 SOMATOSTATIN-14.
CC DISULFID 104 115 BY SIMILARITY.
CC SEQUENCE 115 AA; 12691 MW; 349756FEB4ABE213 CRC64;
Query Match 72.8%; Score 107; DB 1; Length 115;
Best Local Similarity 85.7%; Pred. No. 2.9e-09;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRERKAGCKNFWKFTTSC 25
Db 95 LAPRERKAGCKNFWKFTTSC 115
RESULT 11
SMSL_CHICK STANDARD; PRT; 116 AA.
AC P33094;
DT 01-OCT-1993 (Rel. 27, Created)

DT 01-OCT-1993 (Rel. 27, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-28; Somatostatin-14].
GN SST.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Pancreas;
RA Nata K., Kobayashi T., Karahashi K., Kato S., Yamamoto H.,
RA Yonekura H., Okamoto H.;
RL Submitted (JUN-1991) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC EMBL; X60191; CAA42747.1;
CC PIR; S20630; S20630.
CC InterPro; IPR004250; Somatostatin.
CC Pfam; PF03002; Somatostatin; 1.
CC Cleavage on pair of basic residues; Hormone; Signal.
CC SIGNAL 1 24 BY SIMILARITY.
CC PROPEP 25 88 BY SIMILARITY.
CC PEPTIDE 89 116 SOMATOSTATIN-28.
CC DISULFID 103 116 SOMATOSTATIN-14.
CC SEQUENCE 116 AA; 12675 MW; 8A5BB9BDA8A291BA CRC64;
Query Match 72.8%; Score 107; DB 1; Length 116;
Best Local Similarity 85.7%; Pred. No. 2.9e-09;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRERKAGCKNFWKFTTSC 25
Db 96 LAPRERKAGCKNFWKFTTSC 116
RESULT 12
SMSL_LOPAM STANDARD; PRT; 121 AA.
AC P01169;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin I precursor [Contains: Somatostatin-14].
OS Lophius americanus (American goosefish) (Anglerfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Paracanthopterygii; Lophiiformes; Lophidae; Lophius.
OX NCBI_TaxID=8073;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=81052423; PubMed=6107860;
RA Hobart P.M., Crawford R., Shen L., Pictet R., Rutter W.J.;
RT "Cloning and sequence analysis of cDNAs encoding two distinct
RT somatostatin precursors found in the endocrine pancreas of
RT anglerfish."
RL Nature 288:137-141(1990).
RN [2]
RP SEQUENCE OF 2-121 FROM N.A.
RX MEDLINE=81077276; PubMed=6108560;
RA Goodman R.H., Jacobs J.W., Chin W.W., Lund P.K., Dee P.C.,

HAEBNER J.F.;
"Nucleotide sequence of a cloned structural gene coding for a
precursor of pancreatic somatostatin.";
Proc. Natl. Acad. Sci. U.S.A. 77:5869-5873(1980).
[3]
ERRATUM.
Goodman R.H.; Jacobs J.W.; Chin W.W.; Lund P.K.; Dee P.C.;
Habener J.F.;
Proc. Natl. Acad. Sci. U.S.A. 79:1682-1682(1982).
[4]
SEQUENCE OF 108-121.
MEDLINE-80046482; PubMed-387385;
Noe B.D.; Spiess J.; Rivier J.E.; Vale W.;
"Isolation and characterization of somatostatin from anglerfish
pancreatic islet.";
Endocrinology 105:1410-1415(1979).
[1]
- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
- SUBCELLULAR LOCATION: Secreted.
- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

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EMBL; V00640; CAA23986.1;
PIR; A93236; RIAFSI.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone; Signal;
Multigene family.
SIGNAL 1 24 PROBABLE.
PROPEP 25 105
PEPTIDE 108 121 SOMATOSTATIN-14.
DISULFID 110 121
CONFLICT 21 21 A -> V (IN REF. 2).
CONFLICT 83 83 G -> E (IN REF. 2).
SEQUENCE 121 AA; 13325 MW; D70C53DC798C2095 CRC64;
Query Match 72.8%; Score 107; DB 1; Length 121;
Best Local Similarity 85.7%; Pred. No. 3e-09;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
Db 101 LAPRRKAGCKNFYWKGTSC 121

RESULT 13
MS_PIG STANDARD; PRT; 92 AA.
AC P01168;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-OCT-1989 (Rel. 12, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-28; Somatostatin-14]
DE (Fragment).
GN SST.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE OF 1-64.
RX MEDLINE-89278131; PubMed-2567292;
RA Bersani M.; Thim L.; Baldissera F.G.A.; Holst J.J.;
RT "Somatostatin 1-64 is a major product of somatostatin gene
expression in pancreas and gut.";
RL J. Biol. Chem. 264:10633-10636(1989).
RN [2]

RP SEQUENCE OF 1-32;
RX MEDLINE-86030691; PubMed-2865169;
RA Schmidt W.E.; Mutt V.; Kratzin H.; Carlquist M.; Conlon J.M.;
RA Creutzfeldt W.;
RT "Isolation and characterization of proSS1-32, a peptide derived from
the N-terminal region of porcine preprosomatostatin.";
RL FEBS Lett. 192:141-146(1985).
RN [3]
RP SEQUENCE OF 65-92.
RC TISSUE-Intestine;
RX MEDLINE-80113258; PubMed-7353633;
RA Pradayrol L.; Joernvall H.; Mutt V.; Ribet A.;
RT "N-terminally extended somatostatin: the primary structure of
somatostatin-28.";
RL FEBS Lett. 109:55-58(1980).
RN [4]
RP SEQUENCE OF 65-92.
RC TISSUE-Hypothalamus;
RX MEDLINE-81054799; PubMed-6107906;
RA Schally A.V.; Huang W.-Y.; Chang R.C.C.; Arimura A.; Redding T.W.;
RA Millar R.P.; Hunkapiller M.W.; Hood L.E.;
RT "Isolation and structure of pro-somatostatin: a putative somatostatin
precursor from pig hypothalamus.";
RL Proc. Natl. Acad. Sci. U.S.A. 77:4489-4493(1980).
RN [5]
RP SEQUENCE OF 79-92.
RX MEDLINE-76136331; PubMed-1252409;
RA Schally A.V.; Dupont A.; Arimura A.; Redding T.W.; Nishi N.;
RA Linthicum G.L.; Schlesinger D.H.;
RT "Isolation and structure of somatostatin from porcine hypothalamus.";
RL Biochemistry 15:509-514(1976).
RN [6]
RP SEQUENCE OF 22-92 FROM N.A.
RA Riquet J.;
Submitted (SEP-1995) to the EMBL/GenBank/DBJ databases.
CC - FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC - SUBCELLULAR LOCATION: Secreted.
CC - SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

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EMBL; U36385; AAB38485.1;
PIR; A34109; RIGPS.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone.
NON_TER 1 1
PROPEP 1 64
PEPTIDE 65 92 SOMATOSTATIN-28.
PEPTIDE 79 92 SOMATOSTATIN-14.
DISULFID 81 92
SEQUENCE 92 AA; 10346 MW; 787CBE82CFBBAE76 CRC64;
Query Match 71.4%; Score 105; DB 1; Length 92;
Best Local Similarity 81.0%; Pred. No. 4.5e-09;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
Db 72 LAPRRKAGCKNFYWKGTSC 92

RESULT 14
SMS_BOVIN
ID SMS_BOVIN STANDARD; PRT; 116 AA.
AC P26917;
DT 01-AUG-1992 (Rel. 23, Created)

DT 01-AUG-1992 (Rel. 23, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-28; Somatostatin-14].
GN SST.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=8228237; PubMed=2899837;
RA Su C.J., White J.W., Li W.H., Luo C.C., Frazier M.L., Saunders G.F.,
RA Chan L.;
RT "Structure and evolution of somatostatin genes.";
RL Mol. Endocrinol. 2:209-216(1988).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Holstein;
RX MEDLINE=99198780; PubMed=10100681;
RA Furu L.M., Kazmer G.W., Strausbaugh L., Zinn S.A.;
RT "Cloning and characterization of the bovine somatostatin gene.";
RL J. Anim. Sci. 77:492-493(1993).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC
CC EMBL; M31217; AAA30744.1; -
DR EMBL; U97077; AAB58056.1; -
DR PIR; A40929; RIBOS1.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT PROPEP 25 88 BY SIMILARITY.
FT PEPTIDE 89 116 SOMATOSTATIN-28.
FT PEPTIDE 103 116 SOMATOSTATIN-14.
FT DISULFID 105 116 BY SIMILARITY.
SQ SEQUENCE 116 AA; 12688 MW; C18F17E64A371D8E CRC64;
Query Match 71.4%; Score 105; DB 1; Length 116;
Best Local Similarity 81.0%; Pred. No. 5.8e-09;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
Db : ||||| ||||| |||||
96 MAPRRKAGCKNFYWKGTSC 116
RESULT 15
SMS_CANFA STANDARD; PRT; 116 AA.
AC P49670;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-28; Somatostatin-14].
GN SST.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Gastric mucosa;

RX MEDLINE=97142297; PubMed=8988514;
RA Dickinson C.J., Delvalle J., Todisco A., Gantz I., Tong L.,
RA Finniss S., Yamada T.;
RT "Canine prosomatostatin: isolation of a cDNA, regulation of gene
RT expression, and characterization of post-translational processing
RT intermediates.";
RL Regul. Pept. 67:145-152(1996).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; L42325; AAA67099.1; -
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT PROPEP 25 88 BY SIMILARITY.
FT PEPTIDE 89 116 SOMATOSTATIN-28.
FT PEPTIDE 103 116 SOMATOSTATIN-14.
FT DISULFID 105 116 BY SIMILARITY.
SQ SEQUENCE 116 AA; 12735 MW; AB49BD231E731C9E CRC64;
Query Match 71.4%; Score 105; DB 1; Length 116;
Best Local Similarity 81.0%; Pred. No. 5.8e-09;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 5 LPPRRKAGCKNFYWKGTSC 25
Db : ||||| ||||| |||||
96 MAPRRKAGCKNFYWKGTSC 116
Search completed: August 13, 2003, 14:51:20
Job time : 10.6154 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:48:42 ; Search time 37.8205 Seconds
(without alignments)
170.577 Million cell updates/sec

Title: US-09-727-739B-16
Perfect score: 147
Sequence: 1 SVDNLPFRKAGCKNFYWKGTSC 25

Scoring table: BLOSUM62

Searched: Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23:**
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*
16: sp_bacteriap:*
17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	135	91.8	115	13 Q90Y43	Q90Y43 osteoglossu
2	130	88.4	114	13 Q90Y42	Q90Y42 pantodon bu
3	123	83.7	28	13 Q9PRN9	Q9PRN9 carassius a
4	119	81.0	114	13 Q90Y41	Q90Y41 gnathonemus
5	119	81.0	114	13 Q90Y40	Q90Y40 chitalla chi
6	114	77.6	25	13 Q9PRV0	Q9PRV0 anguilla ja
7	107	72.8	114	13 Q8JHX5	Q8JHX5 brachydanio
8	107	72.8	120	13 Q90Y39	Q90Y39 catostomus
9	105	71.4	116	13 Q90XE1	Q90XE1 acipenser t
10	92	62.6	111	13 Q90XE0	Q90XE0 acipenser t
11	85.5	58.2	23	13 Q9PRV6	Q9PRV6 anguilla ja
12	75	51.0	107	13 Q9DDE4	Q9DDE4 brachydanio
13	65	44.2	122	4 Q8IUU6	Q8IUU6 homo sapien
14	65	44.2	164	4 Q8NFE5	Q8NFE5 homo sapien
15	56.5	38.4	1209	10 Q9SGS6	Q9SGS6 arabidopsis
16	52	35.4	316	10 Q9SRX1	Q9SRX1 arabidopsis

17	52	35.4	496	16 Q8NVQ8	Q8nvq8 staphylococ
18	52	35.4	1402	3 Q8NIV6	Q8niv6 neurospora
19	51	34.7	93	3 Q8XLC4	Q8xic4 talaromyces
20	51	34.7	95	5 Q8TON9	Q8ton9 drosophila
21	51	34.7	101	15 Q65922	Q65922 caprine art
22	49	33.3	808	13 Q42113	Q42113 brachydanio
23	49	33.3	845	5 Q9V466	Q9v466 drosophila
24	48.5	33.0	376	4 Q9NTP6	Q9ntp6 homo sapien
25	48.5	33.0	388	4 Q9Y4W0	Q9y4w0 homo sapien
26	48.5	33.0	414	4 Q96QY1	Q96qyl homo sapien
27	48.5	33.0	587	11 Q8BY59	Q8by59 mus musculu
28	48.5	33.0	598	11 Q8R0Z2	Q8r0z2 mus musculu
29	48.5	33.0	610	4 Q9UH82	Q9uh82 homo sapien
30	48.5	33.0	643	4 Q8TC92	Q8tc92 homo sapien
31	48.5	33.0	643	4 Q9NWE0	Q9nwe0 homo sapien
32	48.5	33.0	643	11 Q8BHR2	Q8bhr2 mus musculu
33	48.5	33.0	652	11 Q54858	Q54858 rattus norv
34	48.5	33.0	652	11 Q54859	Q54859 rattus norv
35	48.5	33.0	654	11 Q8R4V4	Q8r4v4 mus musculu
36	48	32.7	101	15 Q89138	Q89138 visna virus
37	48	32.7	147	16 Q8XFZ7	Q8xfz7 salmonella
38	48	32.7	158	15 Q89124	Q89124 visna virus
39	48	32.7	158	17 Q97C56	Q97c56 thermoplasm
40	48	32.7	364	12 Q84415	Q84415 paramecium
41	48	32.7	509	16 Q9X047	Q9x047 thermotoga
42	48	32.7	887	10 Q9ZSB6	Q9zsb6 arabidopsis
43	48	32.7	910	10 Q93Y01	Q93y01 arabidopsis
44	48	32.7	928	10 Q9T0B6	Q9t0b6 arabidopsis
45	48	32.7	937	10 Q9T0B8	Q9t0b8 arabidopsis

ALIGNMENTS

RESULT 1

Q90Y43
ID Q90Y43 PRELIMINARY; PRT; 115 AA.
AC Q90Y43;
DT 01-DEC-2001 (TremBLrel. 19, Created)
DT 01-DEC-2001 (TremBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TremBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Osteoglossum bicirrhosum (silver arawana).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Osteoglossidae; Osteoglossum.
OX NCBI_TaxID=10971;
RN [1]
RP
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis."
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF292650; AAK97067.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 115 AA; 12791 MW; D65FBD7C6F1E4E4D CRC64;

Query Match

Best Local Similarity 91.8%; Score.135; DB 13; Length 115;
Matches 22; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2 VDNLPFRKAGCKNFYWKGTSC 25

Db 92 LNNLPFRKAGCKNFYWKGTSC.115

RESULT 2

Q90Y42
ID Q90Y42 PRELIMINARY; PRT; 114 AA.
AC Q90Y42;
DT 01-DEC-2001 (TremBLrel. 19, Created)


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DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DE 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Pantodon buchholtzi (Butterflyfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Pantodontidae; Pantodon.
OX NCBI_TaxID=8276;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A.; Irwin D.M.; Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis."
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF292651; AAK97068.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12352 MW; 7E3D44CB6A27B12F CRC64;

Query Match 88.4%; Score 130; DB 13; Length 114;
Best Local Similarity 95.5%; Pred. No. 5.7e-13;
Matches 21; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Y 4 NLPPrERKAGCKNFYWKGTSC 25
Db 93 NVPPrERKAGCKNFYWKGTSC 114
|:|||||
RESULT 3
Q9PRN9 PRELIMINARY; PRT; 28 AA.
AC Q9PRN9;
DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE GSS-28-SOMATOSTATIN-like peptide.
OS Carassius auratus (Goldfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Carassius.
OX NCBI_TaxID=7957;
RN [1]
RP SEQUENCE
RX MEDLINE=96051491; PubMed=8536941;
RA Uesaka T.; Yano K.; Yamasaki M.; Ando M.;
RT "Somatostatin-, vasoactive intestinal peptide-, and granulin-like
RT peptides isolated from intestinal extracts of goldfish, Carassius
RT auratus."
RL Gen. Comp. Endocrinol. 99:298-306(1995).
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 28 AA; 3204 MW; 15D271F677C945BE CRC64;

Query Match 83.7%; Score 123; DB 13; Length 28;
Best Local Similarity 84.0%; Pred. No. 1.8e-12;
Matches 21; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Y 1 SVDNLPPrERKAGCKNFYWKGTSC 25
Db 4 SSNHLPPrERKAGCKNFYWKGTSC 28
|:|||||
RESULT 4
Q90Y41 PRELIMINARY; PRT; 114 AA.
AC Q90Y41;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Gnathonemus petersii.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

```
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Mormyridae; Gnathonemus.
OX NCBI_TaxID=42645;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A.; Irwin D.M.; Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis."
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF292652; AAK97069.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12494 MW; 454DA57A309CA8F2 CRC64;

Query Match 81.0%; Score 119; DB 13; Length 114;
Best Local Similarity 95.2%; Pred. No. 3.3e-11;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Y 5 LPPrERKAGCKNFYWKGTSC 25
Db 94 LAPrERKAGCKNFYWKGTSC 114
|:|||||
RESULT 5
Q90Y40 PRELIMINARY; PRT; 114 AA.
AC Q90Y40;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Preprosomatostatin.
OS Chitala chitala (clown knife-fish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Notopteridae; Chitala.
OX NCBI_TaxID=112163;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A.; Irwin D.M.; Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis."
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF292653; AAK97070.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12561 MW; 4E3C32F58E34F971 CRC64;

Query Match 81.0%; Score 119; DB 13; Length 114;
Best Local Similarity 95.2%; Pred. No. 3.3e-11;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Y 5 LPPrERKAGCKNFYWKGTSC 25
Db 94 LAPrERKAGCKNFYWKGTSC 114
|:|||||
RESULT 6
Q9PRV0 PRELIMINARY; PRT; 25 AA.
AC Q9PRV0;
DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Somatostatin-related peptide.
OS Anguilla japonica (Japanese eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
OC Anguilla.
OX NCBI_TaxID=7937;
RN [1]
RP SEQUENCE.
```


RX MEDLINE=95053622; PubMed=7525832;
RA Uesaka T., Yano K., Yamasaki M., Nagashima K., Ando M.;
RT "Somatostatin-related peptides isolated from the eel gut: effects on
ion and water absorption across the intestine of the seawater eel."
RL J. Exp. Biol. 188:205-216(1994).
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 25 AA; 2860 MW; BFC672143A0A3F5 CRC64;

Query Match 77.6%; Score 114; DB 13; Length 25;
Best Local Similarity 84.0%; Pred. No. 4.3e-11;
Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 SVDNLPPEPRKAGCKNFYWKGTSC 25
DB 1 SVDNQQRERKAGCKNFYWKGTSC 25

RESULT 7

Q8JHX5 PRELIMINARY; PRT; 114 AA.
ID Q8JHX5
AC Q8JHX5
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Somatostatin-14.
GN SSI.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22045842; PubMed=12049777;
RA Devos N., Deflorian G., Biemar F., Bortolussi M., Martial J.A.,
RA Peers B., Argenton F.;
RT "Differential expression of two somatostatin genes during zebrafish
embryonic development."
RL Mech. Dev. 115:133-137(2002).
DR EMBL; AF435965; AAM54072.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12416 MW; 3D41424AE54E74C8 CRC64;

Query Match 72.8%; Score 107; DB 13; Length 114;
Best Local Similarity 85.7%; Pred. No. 2.7e-09;
Matches 18; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFYWKGTSC 25
DB 94 LAPRRKAGCKNFYWKGTSC 114

RESULT 8

Q90Y39 PRELIMINARY; PRT; 120 AA.
ID Q90Y39
AC Q90Y39
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Catostomus commersoni (White sucker).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Catostomidae; Catostomus.
OX NCBI_TaxID=7971;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Molecular cloning and characterization of white sucker
preprosomatostatin."
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF292654; AAK97071.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 120 AA; 13783 MW; 00828D35263E8805 CRC64;
Query Match 72.8%; Score 107; DB 13; Length 120;
Best Local Similarity 72.0%; Pred. No. 2.9e-09;
Matches 18; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

QY 1 SVDNLPPEPRKAGCKNFYWKGTSC 25
DB 96 NTNQLYPRERKAGCKNFYWKGTSC 120

RESULT 9

Q90XE1 PRELIMINARY; PRT; 116 AA.
ID Q90XE1
AC Q90XE1
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Somatostatin.
OS Acipenser transmontanus (White sturgeon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Chondrostei; Acipenseriformes; Acipenseridae;
OC Acipenser.
OX NCBI_TaxID=7904;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Trabucchi M., Tostivint H., Lihmann I., Sollars C., Vallarino M.,
RA Dore R.M., Vaudry H.;
RT "Polygenic expression of somatostatin in the sturgeon Acipenser
transmontanus: molecular cloning and distribution of the mRNAs
encoding two somatostatin precursors."
RL J. Comp. Neurol. 0:0-0(2001).
DR EMBL; AF395849; AAL13248.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 116 AA; 12616 MW; 72E0C3FF6C80650F CRC64;

Query Match 71.4%; Score 105; DB 13; Length 116;
Best Local Similarity 81.0%; Pred. No. 5.8e-09;
Matches 17; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 5 LPPRRKAGCKNFYWKGTSC 25
DB 96 MAPRRKAGCKNFYWKGTSC 116

RESULT 10

Q90XE0 PRELIMINARY; PRT; 111 AA.
ID Q90XE0
AC Q90XE0
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Somatostatin pro2.
OS Acipenser transmontanus (White sturgeon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Chondrostei; Acipenseriformes; Acipenseridae;
OC Acipenser.
OX NCBI_TaxID=7904;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Trabucchi M., Tostivint H., Lihmann I., Sollars C., Vallarino M.,
RA Dore R.M., Vaudry H.;
RT "Polygenic expression of somatostatin in the sturgeon Acipenser
transmontanus: molecular cloning and distribution of the mRNAs
encoding two somatostatin precursors."
RL J. Comp. Neurol. 0:0-0(2001).
DR EMBL; AF395850; AAL13249.1;

DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 111 AA; 12748 MW; 4E27DB90896A9025 CRC64;

Query Match
Best Local Similarity 62.6%; Score 92; DB 13; Length 111;
Matches 16; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY 2 VDNLPPLPRKAGCKNFYWKGTSC 25
Db 88 LSQLPLRARKAPCKNFYWKGTSC 111

RESULT 11
Q9PRV6 PRELIMINARY; PRT; 23 AA.
ID Q9PRV6
AC Q9PRV6
DT 01-MAY-2000 (Tremblrel. 13, Created)
DT 01-MAY-2000 (Tremblrel. 13, Last sequence update)
DT 01-JUN-2002 (Tremblrel. 21, Last annotation update)
DE Somatostatin homolog (Fragment).
OS Anguilla japonica (Japanese eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
C Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
C Anguilla.
OX NCBI_TaxID=7937;
RN [1]
RP SEQUENCE.
RX MEDLINE=95003944; PubMed=7765422;
RA Uesaka T., Yano K., Yamasaki M., Ando M.;
RL Zool. Sci. 11:491-494(1994).
FT NON_TER 1
FT NON_TER 23
SQ SEQUENCE 23 AA; 2655 MW; BA4317DFF3BDBD29 CRC64;

Query Match
Best Local Similarity 58.2%; Score 85.5; DB 13; Length 23;
Matches 19; Conservative 0; Mismatches 4; Indels 1; Gaps 1;

QY 1 SVDNLPPLPRKAGCKNFYWKGTSC 24
Db 1 SVDNQGRERKAG-KNFYWKGTSC 23

RESULT 12
Q9DDE4 PRELIMINARY; PRT; 107 AA.
ID Q9DDE4
AC Q9DDE4
DT 01-MAR-2001 (Tremblrel. 16, Created)
DT 01-MAR-2001 (Tremblrel. 16, Last sequence update)
DT 01-OCT-2002 (Tremblrel. 22, Last annotation update)
DE Somatostatin.
OS SMST OR SOM.
OC Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE-Pancreas;
RX MEDLINE=99425190; PubMed=10495291;
RA Argenton F., Zecchin E., Bortolussi M.;
RT "Early appearance of pancreatic hormone-expressing cells in the
zebrafish embryo.";
RL Mech. Dev. 87:217-221(1999).
DR EMBL; AJ238017; CAC20110.1;
DR ZFIN; ZDB-GENE-010219-2; smst.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 107 AA; 11839 MW; E12C923E56642EFB CRC64;

Query Match
Best Local Similarity 51.0%; Score 75; DB 13; Length 107;

Best Local Similarity 64.7%; Pred. No. 0.00034;
Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 9 ERKAGCKNFYWKGTSC 25
Db 91 ERKTGCKNFYWKSRAC 107

RESULT 13
Q8IUUV6 PRELIMINARY; PRT; 122 AA.
ID Q8IUUV6
AC Q8IUUV6
DT 01-MAR-2003 (Tremblrel. 23, Created)
DT 01-MAR-2003 (Tremblrel. 23, Last sequence update)
DT 01-MAR-2003 (Tremblrel. 23, Last annotation update)
DE Similar to cortistatin (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE-Brain;
RA Strausberg R.;
RL Submitted (NOV-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC040034; AAH40034.1;
FT NON_TER 1
SQ SEQUENCE 122 AA; 13369 MW; A1279CA09CB0CB44 CRC64;

Query Match
Best Local Similarity 44.2%; Score 65; DB 4; Length 122;
Matches 11; Conservative 5; Mismatches 7; Indels 4; Gaps 1;

QY 3 DNLPP---RERKAGCKNFYWKGTSC 25
Db 95 EGAPPOQSARDRMPCRNFFWKTFSSC 121

RESULT 14
Q8NFE5 PRELIMINARY; PRT; 164 AA.
ID Q8NFE5
AC Q8NFE5
DT 01-OCT-2002 (Tremblrel. 22, Created)
DT 01-OCT-2002 (Tremblrel. 22, Last sequence update)
DT 01-MAR-2003 (Tremblrel. 23, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Cai Q., Guo J.H., Yu L.;
RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF521016; AAM70482.1;
DR InterPro; IPR004822; Histone_core.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Hypothetical protein.
SQ SEQUENCE 164 AA; 19047 MW; 389682C41252426A CRC64;

Query Match
Best Local Similarity 44.2%; Score 65; DB 4; Length 164;
Matches 11; Conservative 5; Mismatches 7; Indels 4; Gaps 1;

QY 3 DNLPP---RERKAGCKNFYWKGTSC 25
Db 137 EGAPPOQSARDRMPCRNFFWKTFSSC 163

RESULT 15
Q9SGS6 PRELIMINARY; PRT; 1209 AA.
ID Q9SGS6

AC Q9SGS6;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE T6H22.22 protein (Fragment).
GN T6H22.22.
OS Arabidopsis thaliana (Mouse-ear cress).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
OC eurosids II; Brassicales; Brassicaceae; Arabidopsi.
OX NCBI_TaxID=3702;
RN [1]
RP SEQUENCE FROM N.A.
RA Federspiel N.A., Palm C.J., Conway A.B., Conn L., Hansen N.F.,
RA Altafi H., Nguyen M., Lam B., Buehler E., Dunn P., Gonzalez A.,
RA Kremenetskaia I., Kim C., Lenz C., Li J., Liu S., Lueros S.,
A Schwartz J., Shinn P., Toriumi M., Vysotskaia V.S., Walker M., Yu G.,
A Ecker J., Theologis A., Davis R.W.;
RL Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AC009894; AAF02849.1; -
DR InterPro; IPR000197; TAZ_finger.
DR InterPro; IPR001965; Znf_PHD.
DR InterPro; IPR000433; Znf_ZZ.
DR Pfam; PF02135; zf-TAZ; 1.
DR SMART; SM00249; PHD; 1.
DR SMART; SM00551; Znf_TAZ; 1.
DR SMART; SM00291; Znf_ZZ; 1.
DR PROSITE; PS0134; ZF_TAZ; 1.
DR PROSITE; PS0135; ZF_ZZ_1; 1.
DR PROSITE; PS0135; ZF_ZZ_2; 1.
FT NON_TER 1209 1209
SQ SEQUENCE 1209 AA; E7A280F09790CD53 CRC64;

Query Match 38.4%; Score 56.5; DB 10; Length 1209;
Best Local Similarity 48.1%; Pred. No. 3.8;
Matches 13; Conservative 3; Mismatches 4; Indels 7; Gaps 2;

QY 3 DNLPPRRKAG---CKNFYWKGTSC 25
|: || ||: |
Db 975 DSGPPNERRIGYLDYCKK---RGFTSC 998

Search completed: August 13, 2003, 14:52:59
Job time : 38.8205 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:45:37 ; Search time 26.2051 Seconds
(without alignments)
84.799 Million cell updates/sec

Title: US-09-727-739B-2
Perfect score: 89
Sequence: 1 AGCKNFYWKGETSC 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues:

Total number of hits satisfying chosen parameters: 1107863

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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	89	100.0	14	22	AAU07665	Rainbow trout soma
2	89	100.0	111	22	AAU07668	Rainbow trout prep
3	89	100.0	115	22	AAU07667	Rainbow trout prep
4	89	100.0	125	3	AAU20029	Sequence of prepro
5	83	93.3	14	7	AAP60190	Somatostatin-28 an
6	83	93.3	28	7	AAP61714	Somatostatin-28 an
7	83	93.3	28	10	AAP90989	Analogue of angler
8	77	86.5	14	2	AAP10324	Somatostatin deriv
9	77	86.5	14	2	AAP10421	Somatostatin glyco

10	77	86.5	14	3	AAP20165	Somatostatin. Syn
11	77	86.5	14	4	AAP30668	Sequence of synthe
12	77	86.5	14	5	AAP40316	Sequence encoded b
13	77	86.5	14	5	AAP40808	Sequence encoded b
14	77	86.5	14	7	AAP60863	Somatostatin.. Mam
15	77	86.5	14	8	AAP70928	N-acylated somatos
16	77	86.5	14	10	AAP94654	Somatostatin as en
17	77	86.5	14	13	AAR30543	Metal-radionuclide
18	77	86.5	14	14	AAR38652	Sequence encoded b
19	77	86.5	14	15	AAR50276	Somatostatin S14..
20	77	86.5	14	16	AAW01514	Somatostatin-14..
21	77	86.5	14	16	AAR95412	Somatostatin-14..
22	77	86.5	14	17	AAR92932	Somatostatin pepti
23	77	86.5	14	19	AAW68299	Somatostatin analo
24	77	86.5	14	19	AAW51858	Somatostatin analo
25	77	86.5	14	19	AAW50946	Somatostatin analo
26	77	86.5	14	19	AAW50940	Somatostatin analo
27	77	86.5	14	19	AAW44018	Corticotestin pept
28	77	86.5	14	20	AAW50231	Neutrophil-activat
29	77	86.5	14	20	AAW39620	CTLA-4 VLD CDR loo
30	77	86.5	14	20	AAW30964	Non-crosslinked pr
31	77	86.5	14	20	AAW97182	Somatostatin pepti
32	77	86.5	14	21	AAB08301	Amino acid sequenc
33	77	86.5	14	21	AAW94479	Human somatostatin
34	77	86.5	14	21	AAW91200	Somatostatin, SEQ
35	77	86.5	14	21	AAW68596	Peptide sequence o
36	77	86.5	14	22	AAU05145	Receptor-selective
37	77	86.5	14	22	AAB83200	Human somatostatin
38	77	86.5	14	22	AAB91001	Somatostatin relat
39	77	86.5	14	22	AAB91015	Somatostatin relat
40	77	86.5	14	22	AAB91027	Somatostatin relat
41	77	86.5	14	22	AAW97705	Human melanin-conc
42	77	86.5	14	22	AAB73942	Human somatostatin
43	77	86.5	14	22	AAB48155	Rat somatostatin-1
44	77	86.5	14	22	AAB45615	Somatostatin pepti
45	77	86.5	14	22	AAB45659	Somatostatin pepti

ALIGNMENTS

RESULT 1
AAU07665

AAU07665
ID AAU07665 standard; Peptide; 14 AA.

AA
AC
AAU07665;

AA	
DT	04-DEC-2001 (first entry)

DE Rainbow trout somatostatin 14 (SS-14) variant peptide sequence.

Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I; PPSS-II; PPSS-III; endocrine tumour; pituitary gland; glucagonoma; AIDS; gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus; carcinoid syndrome; cell proliferation; apoptosis; growth hormone; SS-14; glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV; epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective; neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic; anti-human immunodeficiency virus; osteopathic; anticonvulsant.

XX
OS

XX
PN CA2325169-A1.

XX
PD 03-JUN-2001

01-DEC-2000: 2000CA-2325169-XX PF

XX
PR 03-DEC-1999: 99NS-016893A

XX
PA (NDCSP-) NDCSP RES FOUND

XX
PI Sheridan MA Moore CA Kittelsen M.

XX DR WPI; 2001-425997/46.
XX PT New somatostatin polypeptides derived from Oncorhynchus mykiss, useful
XX PT for treating diabetes mellitus, acromegaly, gastrinoma, acquired
XX PT immunodeficiency syndrome and neurological disorders -
XX PS Claim 2; Fig 6; 52pp; English.
XX XX The invention relates to an Oncorhynchus mykiss somatostatin polypeptide
CC containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of
CC preprosomatostatin II (PPSS-II). The protein sequences and their
CC associated polynucleotides are useful for identifying modified
CC somatostatin polypeptides which functions as a somatostatin agonist useful
CC for research, therapeutics or diagnostics, including medical and
CC veterinary applications. The wild-type somatostatin and its modified
CC version are useful for treating hypersecretion from endocrine tumours in
CC the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g.
CC gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage
CC through their effects on cell proliferation and apoptosis and as adjuncts
CC in the treatment of diabetes mellitus via inhibition of growth hormone
CC and glucagon. In addition, dysfunctional somatostatin secretion is
CC associated with acquired immunodeficiency syndrome (AIDS) and various
CC neurological disorders (e.g. epilepsy, Alzheimer's disease and
CC Huntington's disease) and somatostatin antagonists are effective in the
CC treatment of such conditions. Nucleic acids encoding the polypeptides are
CC useful in gene therapy and fusion peptides can be targeted to neoplasms
CC and their metastases, inhibiting the release of their secretory products.
CC This sequence represents a variant somatostatin 14 (SS-14) peptide.
XX SQ Sequence 14 AA;

Query Match 100.0%; Score 89; DB 22; Length 14;
Best Local Similarity 100.0%; Pred. No. 6.5e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
| | | | | | | | | | | | | | | |
Db 1 AGCKNFYWKGTSC 14

RESULT 2
AAU07668
ID AAU07668 standard; Protein; 111 AA.
AC AAU07668;
XX
XX 04-DEC-2001 (first entry)
DT
XX
DE Rainbow trout preprosomatostatin II (PPSS-II') polypeptide.

Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I;
PPSS-II'; PPSS-II'; endocrine tumour; pituitary gland; glucagonoma; AIDS;
gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus;
carcinoid syndrome; cell proliferation; apoptosis; growth hormone;
glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV;
epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective;
neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic;
anti-human immunodeficiency virus; osteopathic; anticonvulsant.

Oncorhynchus mykiss.
XX Key Location/Qualifiers
XX FT Peptide 1..25
XX FT /note= "Signal peptide"
XX FT Protein 1..86
XX FT /note= "PPSS-II' pre-sequence"
XX FT Protein 26..111
XX FT /note= "Mature PPSS-II'"
XX FT Peptide 87..97
XX FT /note= "PPSS-II' pro-sequence"
XX FT Peptide 87..111
XX FT /note= "Prosomatostatin II'"

FT Cleavage-site 96..97 /note= "Dibasic cleavage site"
FT Peptide 98..111 /note= "SS-14 variant peptide"
XX CA2325169-A1.
XX PD 03-JUN-2001.
XX 01-DEC-2000; 2000CA-2325169.
XX 03-DEC-1999; 99US-0168934.
XX (NDSU-) NDSU RES FOUND.
XX Sheridan MA, Moore CA, Kittelson JD;
XX WPI; 2001-425997/46.
XX N-PSDB; AAS12935.
XX New somatostatin polypeptides derived from Oncorhynchus mykiss, useful
XX for treating diabetes mellitus, acromegaly, gastrinoma, acquired
XX immunodeficiency syndrome and neurological disorders -
XX Claim 1; Fig 3; 52pp; English.

The invention relates to an Oncorhynchus mykiss somatostatin polypeptide
containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of
preprosomatostatin II (PPSS-II). The protein sequences and their
associated polynucleotides are useful for identifying modified
somatostatin polypeptides which functions as a somatostatin agonist useful
for research, therapeutics or diagnostics, including medical and
veterinary applications. The wild-type somatostatin and its modified
version are useful for treating hypersecretion from endocrine tumours in
the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g.
gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage
through their effects on cell proliferation and apoptosis and as adjuncts
in the treatment of diabetes mellitus via inhibition of growth hormone
and glucagon. In addition, dysfunctional somatostatin secretion is
associated with acquired immunodeficiency syndrome (AIDS) and various
neurological disorders (e.g. epilepsy, Alzheimer's disease and
Huntington's disease) and somatostatin antagonists are effective in the
treatment of such conditions. Nucleic acids encoding the polypeptides are
useful in gene therapy and fusion peptides can be targeted to neoplasms
and their metastases, inhibiting the release of their secretory products.
This sequence represents O. Mykiss PPSS-II' protein.
Note: The features for this sequence are specifically claimed in the
specification.

XX SQ Sequence 111 AA;

Query Match 100.0%; Score 89; DB 22; Length 111;
Best Local Similarity 100.0%; Pred. No. 4.7e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
| | | | | | | | | | | | | | | |
Db 98 AGCKNFYWKGTSC 111

RESULT 3
AAU07667
ID AAU07667 standard; Protein; 115 AA.
XX
XX AC AAU07667;
XX 04-DEC-2001 (first entry)
XX DT
XX DE Rainbow trout preprosomatostatin II (PPSS-II') polypeptide.
XX
XX KW Rainbow trout; somatostatin; preprosomatostatin; hypersecretion; PPSS-I;
KW PPSS-II'; PPSS-II'; endocrine tumour; pituitary gland; glucagonoma; AIDS;
KW gastroenteropancreatic tissue; acromegaly; gastrinoma; diabetes mellitus;

carcinoid syndrome; cell proliferation; apoptosis; growth hormone; glucagon; acquired immunodeficiency syndrome; neurological disorder; HIV; epilepsy; Alzheimer's disease; Huntington's disease; neuroprotective; neoplasm; metastasis; gene therapy; antidiabetic; nootropic; cytostatic; anti-human immunodeficiency virus; osteopathic; anticonvulsant.

Oncorhynchus mykiss.

Key Location/Qualifiers
Peptide 1..25 /note= "Signal peptide"
Protein 1..87 /note= "PPSS-II' pre-sequence"
Protein 26..115 /note= "Mature PPSS-II'"
Misc-difference 74 /note= "Encoded by CAA"
Peptide 88..101 /note= "PPSS-II' pro-sequence"
Peptide 88..115 /note= "Prosomatostatin II'"
Cleavage-site 100..101 /note= "Dibasic cleavage site"
Peptide 102..115 /note= "SS-14 variant peptide"

CA2325169-A1.

03-JUN-2001.

01-DEC-2000; 2000CA-2325169.

03-DEC-1999; 99US-0168934.

(NDSU-) NDSU RES FOUND.

Sheridan MA, Moore CA, Kittelson JD;

WPI; 2001-425997/46.
N-PSDB; AAS12934.

New somatostatin polypeptides derived from *Oncorhynchus mykiss*, useful for treating diabetes mellitus, acromegaly, gastrinoma, acquired immunodeficiency syndrome and neurological disorders.

Claim 2; Fig 3; 52pp; English.

The invention relates to an *Oncorhynchus mykiss* somatostatin polypeptide containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of preprosomatostatin II (PPSS-II). The protein sequences and their associated polynucleotides are useful for identifying modified somatostatin polypeptides which functions as a somatostatin agonist useful for research, therapeutics or diagnostics, including medical and veterinary applications. The wild-type somatostatin and its modified version are useful for treating hypersecretion from endocrine tumours in the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g. gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage through their effects on cell proliferation and apoptosis and as adjuncts in the treatment of diabetes mellitus via inhibition of growth hormone and glucagon. In addition, dysfunctional somatostatin secretion is associated with acquired immunodeficiency syndrome (AIDS) and various neurological disorders (e.g. epilepsy, Alzheimer's disease and Huntington's disease) and somatostatin antagonists are effective in the treatment of such conditions. Nucleic acids encoding the polypeptides are useful in gene therapy and fusion peptides can be targeted to neoplasms and their metastases, inhibiting the release of their secretory products. This sequence represents O. Mykiss PPSS-II' protein.
Note: The features for this sequence are specifically claimed in the specification.

Sequence 115 AA;

Query Match

100.0%; Score 89; DB 22; Length 115;

Best Local Similarity 100.0%; Pred. No. 4.9e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 AGCKNFYWKGTSC 14
Db 102 AGCKNFYWKGTSC 115
|||||

RESULT 4
AAP20029
ID AAP20029 standard; Protein; 125 AA.

XX AAP20029;

XX 25-MAR-2003 (updated)
DT 16-AUG-2002 (updated)
DT 14-AUG-1992 (first entry)

XX Sequence of preprosomatostatin-2 encoded on pLas2.
XX Somatostatin; growth hormone; peptide hormone; secretion.
XX Lophius americanus.

XX Key Location/Qualifiers
FT Protein 112..125
FT /label= Somatostatin II

PN EP46669-A.

XX 03-MAR-1982.

XX 21-AUG-1981; 81EP-0303825.

XX 25-AUG-1980; 80US-0181046.

XX (REGC) UNIV CALIFORNIA.

PI Hobart P, Crawford R, Pictet RL, Rutter WJ;

DR WPI; 1982-18113E/10.

DR N-PSDB; AAN20034.

PT New somatostatin and precursors - produced by transformed microorganisms

PS Example; Fig 3; 50pp; English.

XX The inventors claim preprosomatostatin-1, preprosomatostatin-2, and DNA preprosomatostatin-2, preprosomatostatin-2 and somatostatin-2; and DNA encoding them. The translation of somatostatin mRNA yields a precursor (prepro S1) containing a signal peptide which may be released during the transit into the endoplasmic reticulum, and the resultant precursor (pro S1) is subsequently cleaved to yield S1 itself. The prepeptide portion of prepro S1 is probably about 20-25 bases long. Translation of pLas2 predicts the sequence of a 125 AA peptide which surprisingly contains a 14 AA sequence at its carboxy terminus which differs from S1 by only 2 AAs, and is termed Somatostatin 2 (S2).
CC (Updated on 16-AUG-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 125 AA;

Query Match
Best Local Similarity 100.0%; Score 89; DB 3; Length 125;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14

Db 112 AGCKNFYWKGTSC 125
|||||

RESULT 5
AAP60190
ID AAP60190 standard; protein; 14 AA.
XX AC
XX AAP60190;
DT 25-MAR-2003 (updated)
DT 28-JUL-1991 (first entry)
XX DE
XX Somatostatin-28 analogue.
KW Somatostatin-28; insulin-selective; insulinoma.
XX OS
XX Synthetic.
XX Key
FH Modified-site 9 Location/Qualifiers
FT /label= Hyl
XX
PN EP173527-A.
PD 05-MAR-1986.
XX
PF 16-AUG-1985; 85EP-0305867.
X
R 31-AUG-1984; 84US-0646610.
PR 01-APR-1987; 87US-0033295.
XX
PA (SALK) SALK INST BIOLOGICAL STUDIES.
XX
PI Spiess J, Noe BD;
XX
DR WPI; 1986-063363/10.
XX
PT Angler fish somatostatin-28 and analogue and fragment - useful in
PT inhibiting insulin secretion in insulinoma.
XX
PS Claim 4; Page 18; 19pp; English.
XX
CC The protein sequence is an insulin-selective analogue
CC of anglerfish somatostatin-28, which is more potent than
CC somatostatin-14 or somatostatin-28 in inhibiting insulin
CC secretion for treatment of insulinoma.
CC (Updated on 25-MAR-2003 to correct PR field.)
CC (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 14 AA;

Query Match 93.3%; Score 83; DB 7; Length 14;
Best Local Similarity 92.9%; Pred. No. 5.3e-06;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
DB
1 AGCKNFYWKGTSC 14
|||||
1 AGCKNFYWXGTSC 14
DB
RESULT 6
AAP61714
ID AAP61714 standard; Protein; 28 AA.
XX AC
XX AAP61714;
DT 25-MAR-2003 (updated)
DT 28-JUL-1991 (first entry)
XX DE
XX Somatostatin-28 analogue.
XX
KW Somatostatin-28; insulin-selective; insulinoma.
XX OS
XX Synthetic.
XX Key
FH Location/Qualifiers

Query Match 93.3%; Score 83; DB 7; Length 14;
Best Local Similarity 92.9%; Pred. No. 5.3e-06;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
DB
1 AGCKNFYWKGTSC 14
|||||
1 AGCKNFYWXGTSC 14
DB
RESULT 6
AAP61714
ID AAP61714 standard; Protein; 28 AA.
XX AC
XX AAP61714;
DT 25-MAR-2003 (updated)
DT 28-JUL-1991 (first entry)
XX DE
XX Somatostatin-28 analogue.
XX
KW Somatostatin-28; insulin-selective; insulinoma.
XX OS
XX Synthetic.
XX Key
FH Location/Qualifiers

Misc-difference 23
/label= Hyl, Lys
EP173527-A.
05-MAR-1986.
16-AUG-1985; 85EP-0305867.
31-AUG-1984; 84US-0646610.
01-APR-1987; 87US-0033295.
XX
PA (SALK) SALK INST BIOLOGICAL STUDIES.
XX
PI Spiess J, Noe BD;
XX
DR WPI; 1986-063363/10.
XX
PT Angler fish somatostatin-28 and analogue and fragment - useful in
PT inhibiting insulin secretion in insulinoma.
XX
PS Claim 4; Page 18; 19pp; English.
XX
CC The protein sequence is an insulin-selective analogue
CC of anglerfish somatostatin-28, which is more potent than
CC somatostatin-14 or somatostatin-28 in inhibiting insulin
CC secretion for treatment of insulinoma.
CC (Updated on 25-MAR-2003 to correct PR field.)
CC (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 28 AA;

Query Match 93.3%; Score 83; DB 7; Length 28;
Best Local Similarity 92.9%; Pred. No. 1e-05;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
DB
1 AGCKNFYWKGTSC 14
|||||
15 AGCKNFYWXGTSC 28

RESULT 7
AAP90989
ID AAP90989 standard; peptide; 28 AA.
XX AC
XX AAP90989;
DT 25-MAR-2003 (updated)
DT 08-JUN-1990 (first entry)
XX DE
XX Analogue of anglerfish somatostatin 28.
XX
KW Somatostatin 28; SS-28; analogue; insulin secretion
KW inhibitor; insulinoma; gastric acid secretion; thermoregulation.
XX OS
XX Anglerfish.
XX
FH Key
FH Disulfide-bond 17 Location/Qualifiers
FT /note="Bonded to Cys-28"
FT Disulfide-bond 28
FT /note="Bonded to Cys-17"
FT Misc-difference 23
FT /label=Lys, Hyl
FT Region 15..28
FT /note="Also claimed"
XX
PN US4816438-A.
XX
PD 28-MAR-1989.
XX
PF 01-APR-1987; 87US-0033295.
XX

PR 01-APR-1987; 87US-0033295.
PR 31-AUG-1984; 84US-0646610.
PA (SALK) SALK INST BIOLOGICAL STUDIES.
XX Spiess J, Noe BD;
PI WPI; 1989-113910/15.
XX Angler fish somatostatin-28 and fragments -
XX useful in inhibiting insulin secretion and insulinoma
PT Claim 1; page 65; 8pp; English.
PS It is called ASS-28 because it is an analogue of anglerfish somatostatin
CC (SS-28). It is more potent than either somatostatin 14 (SS-14) or SS-28
CC at inhibiting insulin secretion for the treatment of insulinoma. The
CC 14-residue C-terminal peptide is also claimed (ASS-14). ASS-14 is useful
CC for inhibiting insulin secretion by the pancreas. ASS-28 and ASS-28 may
CC be useful for decreasing gastric acid secretion and influencing
CC thermoregulation. Their reduced linear forms, wherein the disulphide
CC bridge is not present and is replaced by H, is also claimed.
CC (Updated on 25-MAR-2003 to correct PA field.)
XX

SQ Sequence 28 AA;
Query Match 93.3%; Score 83; DB 10; Length 28;
Best Local Similarity 92.9%; Pred. No. 1e-05;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 AGCKNFYWKGTSC 14
Db 15 AGCKNFYWKGTSC 28

RESULT 8
AAP10324
ID AAP10324 standard; peptide; 14 AA.
XX AAP10324;
XX 25-MAR-2003 (updated)
DT 15-DEC-1992 (first entry)
XX Somatostatin deriv. A28.
XX Growth Hormone secretion; GH; diabetes mellitus; angiopathy;
KW acromegaly; diagnosis.
XX Synthetic.
XX Key Location/Qualifiers
FH Modified-site 14 /note= "Cys-pyrrolidine amide"
FT
XX CH621770-A.
XX 27-FEB-1981.
XX 11-SEP-1980; 80CH-0125375.
XX 01-FEB-1984; 84CA-0446545.
XX (SANO) SANDOZ AG.
XX Sandrin E, Bauer W;
PI WPI; 1981-21515D/13 (21515D).
XX Somatostatin derivs. prodn. - useful for treating diabetes,
PT acromegalia and angiopathy
XX Example 1; Page 6; 8pp; German.
PS

XX This peptide is an example of a generic formula for somatostatin
CC derivs. which inhibit secretion of growth hormone and are useful to
CC treat diabetes mellitus, acromegaly, angiopathy and in diagnosis.
CC See AAP10308-P10348
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 14 AA;
Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1 AGCKNFYWKGTSC 14
Db 1 AGCKNFYWKGTSC 14

RESULT 9
AAP10421
ID AAP10421 standard; peptide; 14 AA.
XX AAP10421;

XX 17-DEC-1992 (first entry)
XX Somatostatin glycosylated analogue.
DE Carbohydrate moiety; pentose; hexose; pyranose; glucose; fructose.
KW Synthetic.
XX Key Location/Qualifiers
FH Modified-site 5 /label= R1
FT /note= "May be opt. substd. by H or a hexose or
FT aminohexose moiety modified in the 2-position
FT with an amide group, the hexose having the
FT pyranose structure; R1-R4 are not all H"
FT Modified-site 10 /label= R2
FT /note= "May be opt. substd. by H or a hexose or
FT aminohexose moiety modified in the 2-position
FT with an amide group, the hexose having the
FT pyranose structure; R1-R4 are not all H"
FT Modified-site 12 /label= R3
FT /note= "May be opt. substd. by H or a hexose or
FT aminohexose moiety modified in the 2-position
FT with an amide group, the hexose having the
FT pyranose structure; R1-R4 are not all H"
FT Modified-site 13 /label= R4
FT /note= "May be opt. substd. by H or a hexose or
FT aminohexose moiety modified in the 2-position
FT with an amide group, the hexose having the
FT pyranose structure; R1-R4 are not all H"

Disulphide_bond 3..14

US4280953-A.

28-JUL-1981.

08-NOV-1979; 79US-0092647.

08-NOV-1979; 79US-0092647.

(SALK-) SALK INST BIOLOGIC.

Guillemin RCL, Lavielle S, Brazeau PE, Ling NC, Benoit RA;

WPI; 1981-60313D/33 (60313D).

PT Somatostatin glycosylated analogues - with prolonged half-lives
XX and similar activities and potency to somatostatin
PS Claim 1; Page 11; 13pp; English.
XX This sequence has an extended biological half-life compared with
CC native somatostatin and some of its analogues. It has a long
CC acting inhibitory effect on growth hormone secretion by the pituitary,
CC secretion of glucagon and insulin by the pancreas and secretion of
CC vasoactive intestinal polypeptides, secretin, gastrin and gastric acid.
CC It has a similar inhibitory efficiency to native somatostatin. The
CC increased acting inhibitory effect of this peptide is due to the
CC inclusion of a carbohydrate moiety in to the somatostatin chain.
CC This carbohydrate moiety can be linked to either Ser, Asn or Thr
CC which appear in the somatostatin peptide chain. Convenient
CC monosaccharides, particularly those having the pyranose structure,
CC such as glucose and fructose.
XX Sequence 14 AA;

Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
JY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKFTSC 14

RESULT 10
AAP20165
ID AAP20165 standard; Protein; 14 AA.

XX AAP20165;
AC
XX 25-MAR-2003 (updated)
DT 15-SEP-1992 (first entry)
XX
DE Somatostatin.
XX Somatostatin.
KW Synthetic;
OS US4356270-A.
XX 26-OCT-1982.
PD 05-NOV-1979; 79US-0091334.
PF 26-SEP-1985; 85US-0780734.
PR (GETH) GENETECH INC.
XX Itakura K;
PI WPI; 1982-97410E/45 (97410E).
XX N-PSDB; AAN20160.
DR Recombinant microbial cloning vehicle - for expression of
XX polypeptide(s), esp. hormones such as somatostatin.
PT Disclosure; Fig 2; 23pp; English.
XX The sequence represents somatostatin, which may be expressed
CC after synthetic gene expression in microorganisms.
CC (Updated on 25-MAR-2003 to correct PR field.)
CC (Updated on 25-MAR-2003 to correct PA field.)
XX Sequence 14 AA;

Query Match 86.5%; Score 77; DB 3; Length 14;

Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKFTSC 14
RESULT 11
AAP30668
ID AAP30668 standard; Protein; 14 AA.
XX AAP30668;
AC 25-MAR-2003 (updated)
DT 16-AUG-2002 (updated)
DT 31-OCT-1992 (first entry)
XX Sequence of synthetic somatostatin gene.
DE Synthetic gene; heterologous protein.
XX Synthetic.
KW US4366246-A.
XX 28-DEC-1982.
PD 05-NOV-1979; 79US-0090980.
PF 26-SEP-1985; 85US-0780734.
PR (GETH) GENETECH INC.
XX Riggs AD;
PI WPI; 1983-07104K/03 (07104K).
XX N-PSDB; AAN30312.
DR Polypeptide prodn. by genetically transformed microorganism - in
XX form of cleavable conjugate with another protein
PT Disclosure; Fig 2; 23pp; English.
XX The synthetic somatostatin gene is prepd. from oligonucleotide
CC fragments composed of codons preferred for the expression microbial
CC genomes. Where the structural gene of a desired polypeptide is to be
CC inserted in a cloning vehicle for expression as such, the gene is
CC preceded by a start codon and immediately followed by one or more
CC termination or stop codons. AAN30312 also exemplifies a further
CC feature preferred in heterologous DNA intended for recombinant
CC employment, i.e., the provision of cohesive termini, preferably
CC comprising one of the two strands of a restriction endonuclease
CC recognition site
CC (Updated on 16-AUG-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX Sequence 14 AA;

Query Match 86.5%; Score 77; DB 4; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKFTSC 14

RESULT 12
AAP40316
ID AAP40316 standard; Protein; 14 AA.
XX AAP40316;

XX DT 11-FEB-1992 (first entry)
XX DE Sequence encoded by synthetic gene for somatostatin.
XX KW Growth hormone inhibitor; insulin inhibitor; glucagon inhibitor;
XX KW acromegaly therapy; pancreatitis; insulin-dependent diabetes.
XX OS Homo sapiens.
XX PN US4425437-A.
XX PD 10-JAN-1984.
XX PF 30-JUL-1982; 82US-0403674.
XX R 30-JUL-1982; 82US-0403674.
XX PR 08-NOV-1977; 77US-0849591.
XX PR 05-NOV-1979; 79US-0090980.
XX PA (GETH) GENENTECH INC.
XX PI Riggs AD;
XX DR WPI; 1984-029658/05.
XX DR N-PSDB; AAN40257.
XX PT Recombinant microbial cloning vehicle - esp. useful for host
XX PT expression of polypeptide e.g. somatostatin
XX PS Disclosure; Fig 2; 23pp; English.
XX CC The inventors claim a recombinant microbial cloning vehicle for host
XX CC expression of polypeptide. Plasmids PSOM 1 and PSOM 11 are new. The
XX CC polypeptide is expressed from a synthetic gene, and it is esp.
XX CC somatostatin e.g. described in US3904594.
XX SQ Sequence 14 AA;
Query Match 86.5%; Score 77; DB 5; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 AGCKNFYWKGTSC 14
Db 1 AGCKNFFWKFTSC 14
RESULT 13
AAP40808
ID AAP40808 standard; peptide; 14 AA.
XX AC AAP40808;
XX DT 16-AUG-2002 (updated)
XX DT 03-AUG-1992 (first entry)
XX DE Sequence encoded by synthetic somatostatin gene.
XX KW Protein conjugate; transformed bacteria; plasmid.
XX OS Synthetic.
XX PN US4431739-A.
XX PD 14-FEB-1984.
XX PF 30-JUL-1982; 82US-0403675.
XX PR 30-JUL-1982; 82US-0403657.
XX PR 08-NOV-1977; 77US-0849591.
XX PA (GETH) GENENTECH INC.

XX PI Riggs AD;
XX DR WPI; 1984-056011/09.
XX DR N-PSDB; AAN40292.
XX PT Transformant bacterial culture cloned from bacteria - for
XX PT cultivation to give somatostatin etc. Linked to protein
XX PS Disclosure; Fig 2; 23pp; English.
XX CC The inventors claim a transformant bacterial culture cloned from
XX CC one or more bacteria, each comprising a recombinant microbial
XX CC vehicle. The vehicle comprises: (regulon)-(codons for additional
XX CC protein) - (codons for desired heterologous polypeptide)-
XX CC (termination codon(s)). Prodn. of such protein conjugates is
XX CC described in US4366246 (071 04K/03). The heterologous protein is
XX CC esp. somatostatin or human insulin. Bacterial cultures comprising
XX CC E. coli RRI (PSM01) and PSOM11 are claimed. The DNA and amino
XX CC acid sequences in this patent application are the same as those in
XX CC US 4366-246.
XX CC (Updated on 16-AUG-2002 to add missing OS field.)
XX SQ Sequence 14 AA;
Query Match 86.5%; Score 77; DB 5; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 AGCKNFYWKGTSC 14
Db 1 AGCKNFFWKFTSC 14
RESULT 14
AAP60863
ID AAP60863 standard; protein; 14 AA.
XX AC AAP60863;
XX DT 31-OCT-2002 (updated)
XX DT 05-JUL-1991 (first entry)
XX DE Somatostatin.
XX KW Synthetic gene; somatostatin; cloning vehicle; beta-galactosidase;
XX KW fusion protein; vaccine; radioimmunoassay;
XX OS Mammalia.
XX PN US4563424-A.
XX PD 07-JAN-1986.
XX PF 30-JUL-1982; 82US-0403676.
XX PR 30-JUL-1982; 82US-0403676.
XX PR 08-NOV-1977; 77US-0849591.
XX PR 05-NOV-1979; 79US-0090980.
XX PR 16-OCT-1985; 85US-0787871.
XX PA (GETH) GENENTECH INC.
XX PI Riggs AD;
XX DR WPI; 1986-035095/05.
XX DR N-PSDB; AAN60778.
XX PT Recombinant cloning vehicle contg. gene for somatostatin -
XX PT expressed as immunogenic fusion prod. with bacterial polypeptide
XX PS Disclosure; Fig. 2; 22pp; English.

CC The somatostatin is encoded by a synthetic gene, which is present in a
CC cloning vector. The vector also comprises a regulon, one or more
CC termination codons, and a DNA sequence encoding an additional protein,
CC eg beta-galactosidase. Somatostatin is expressed as a fusion protein
CC which can be cleaved with CNBr to give the two proteins. Temporary
CC incorporation of somatostatin into a fusion prod. protects it from
CC in vivo degradation by endogenous enzymes. Alternatively, the fusion
CC protein can be used to raise antibodies for RIA, or in the prepn. of
CC vaccines.
CC (Updated on 31-OCT-2002 to add missing OS field.)
XX

SQ Sequence 14 AA;
Query Match 86.5%; Score 77; DB 7; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
| | | | | : | | | | |
Db 1 AGCKNFFWKTFTSC 14

RESULT 15
AAP70928
D AAP70928 standard; protein; 14 AA.

AC AAP70928;
XX 25-MAR-2003 (updated)
DT 09-JAN-2003 (updated)
DT 12-MAR-1991 (first entry)
XX

DE N-acetylated somatostatin deriv.

XX Somatostatin; diabetes; gastrointestinal disorders.

XX Unidentified.

Key Location/Qualifiers
FT Modified-site 1..1 /label= N-acetylated alanine
FT Modified-site 4..4 /label= N-acetylated lysine
FT Modified-site 9..9 /label= N-acetylated lysine
FT Disulfide-bond 3..14

XX DE3522638-A.

XX 08-JAN-1987.

XX 25-JUN-1985; 85DE-3522638.

XX 25-JUN-1985; 85DE-3522638.

XX (DIAL) DIAMALT AG.
XX (JUNG/) JUNG G.

XX Jung G;

XX WPI; 1987-008083/02.

XX New N-acetylated somatostatin derivs. - useful for treating
XX diabetes and gastrointestinal disorders

XX Claim 1; page 1; 3pp; German.

XX This somatostatin deriv. has the same activity as natural somato-
XX statin but has a more specific and longer lasting action. It is
XX useful in the treatment of diabetes and gastrointestinal disorders
XX at a dosage of 0.05-0.2 mg/kg.
XX (Updated on 09-JAN-2003 to add missing OS field.)
XX (Updated on 25-MAR-2003 to correct PA field.)

XX SQ Sequence 14 AA;

Query Match 86.5%; Score 77; DB 8; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
| | | | | : | | | | |
Db 1 AGCKNFFWKTFTSC 14

Search completed: August 13, 2003, 14:50:59
Job time : 28.2051 secs

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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:49:47 ; Search time 13.641 Seconds
(without alignments)
134.451 Million cell updates/sec

Title: US-09-727-739B-2
Perfect score: 89
Sequence: 1 AGCKNFYWKGTSC 14

--Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 492763 seqs, 131003257 residues
Total number of hits satisfying chosen parameters: 492763

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pap:*
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3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pap:*
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11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pap:*
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15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pap:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pap:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pap:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	77	86.5	14	10	US-09-316-505-2
2	77	86.5	14	12	US-10-224-640-2
3	77	86.5	14	12	US-10-251-703-18
4	77	86.5	14	14	US-10-101-487-37
5	77	86.5	15	14	US-10-101-487-52
6	77	86.5	110	9	US-09-766-396-3
7	77	86.5	110	14	US-10-062-375-3
8	77	86.5	140	9	US-09-280-030-64
9	77	86.5	200	14	US-10-101-487-53
10	63	70.8	14	9	US-09-766-396-8
11	63	70.8	14	14	US-10-062-375-8
12	63	70.8	14	15	US-10-221-841-9
13	63	70.8	15	9	US-09-766-396-23
14	63	70.8	15	14	US-10-062-375-23
15	63	70.8	29	9	US-09-766-396-7

16	63	70.8	29	9	US-09-766-396-11	Sequence 11, Appl
17	63	70.8	29	14	US-10-062-375-7	Sequence 7, Appl
18	63	70.8	29	14	US-10-062-375-11	Sequence 11, Appl
19	63	70.8	84	9	US-09-766-396-10	Sequence 10, Appl
20	63	70.8	84	14	US-10-062-375-10	Sequence 10, Appl
21	63	70.8	85	9	US-09-766-396-6	Sequence 6, Appl
22	63	70.8	85	14	US-10-062-375-6	Sequence 6, Appl
23	63	70.8	109	9	US-09-766-396-5	Sequence 5, Appl
24	63	70.8	109	14	US-10-062-375-5	Sequence 5, Appl
25	63	70.8	112	9	US-09-766-396-2	Sequence 2, Appl
26	63	70.8	112	12	US-10-335-125-3	Sequence 3, Appl
27	63	70.8	112	14	US-10-062-375-2	Sequence 2, Appl
28	60	67.4	29	12	US-10-335-125-4	Sequence 4, Appl
29	60	67.4	29	15	US-10-197-954-41	Sequence 41, Appl
30	60	67.4	105	9	US-09-766-396-26	Sequence 26, Appl
31	60	67.4	105	12	US-10-335-125-2	Sequence 2, Appl
32	60	67.4	105	12	US-10-335-125-13	Sequence 13, Appl
33	60	67.4	105	14	US-10-062-375-26	Sequence 26, Appl
34	60	67.4	155	12	US-10-137-870-380	Sequence 380, App
35	60	67.4	155	12	US-10-140-018-380	Sequence 380, App
36	60	67.4	155	12	US-10-140-021-380	Sequence 380, App
37	60	67.4	155	12	US-10-140-274-380	Sequence 380, App
38	60	67.4	155	12	US-10-140-471-380	Sequence 380, App
39	60	67.4	155	12	US-10-140-807-380	Sequence 380, App
40	60	67.4	155	12	US-10-140-922-380	Sequence 380, App
41	60	67.4	155	12	US-10-140-924-380	Sequence 380, App
42	60	67.4	155	12	US-10-140-926-380	Sequence 380, App
43	60	67.4	155	12	US-10-141-698-380	Sequence 380, App
44	60	67.4	155	12	US-10-141-702-380	Sequence 380, App
45	60	67.4	155	12	US-10-141-704-380	Sequence 380, App

ALIGNMENTS

RESULT 1
US-09-316-505-2
; Sequence 2, Application US/09316505
; Patent No. US20020111461A1
; GENERAL INFORMATION:
; APPLICANT: Burnier, John P.
; APPLICANT: Clark, Ross G.
; APPLICANT: Elias, Kathleen A.
; APPLICANT: McDowell, Robert S.
; APPLICANT: Rawson, Thomas E.
; APPLICANT: Somers, Todd C.
; APPLICANT: Stanley, Mark S.
; TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GROWTH HORMONE SECRETAGOG
; FILE REFERENCE: P0850D2
; CURRENT APPLICATION NUMBER: US/09/316,505
; CURRENT FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: US 09/057,074
; PRIOR FILING DATE: 1998-04-08
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Homosapiens
US-09-316-505-2

Query Match 86.5%; Score 77; DB 10; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.4e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
| | | | | | | | | | | | | | | |
Db 1 AGCKNFYWKGTSC 14

RESULT 2
US-10-224-640-2
; Sequence 2, Application US/10224640
; Publication No. US20030139348A1

GENERAL INFORMATION:
; APPLICANT: Burnier, John P.
; APPLICANT: Clark, Ross G.
; APPLICANT: Elias, Kathleen A.
; APPLICANT: McDowell, Robert S.
; APPLICANT: Rawson, Thomas E.
; APPLICANT: Somers, Todd C.
; APPLICANT: Stanley, Mark S.
; TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GROWTH HORMONE SECRETAGOGUES
; FILE REFERENCE: P0850D2C1
; CURRENT APPLICATION NUMBER: US/10/224,640
; CURRENT FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 09/057,074
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: US 08/340,767
; PRIOR FILING DATE: 1994-11-16
; PRIOR APPLICATION NUMBER: US 09/316,505
; PRIOR FILING DATE: 1999-05-21
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Homosapiens
; S-10-224-640-2

Query Match 86.5%; Score 77; DB 12; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.4e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNEFWKFTTSC 14

RESULT 3

US-10-251-703-18
; Sequence 18, Application US/10251703
; Publication No. US20030148449A1
; GENERAL INFORMATION:
; APPLICANT: Kuliopulos, Athan
; APPLICANT: Covic, Lidija
; TITLE OF INVENTION: G Protein Coupled Receptor Agonists and Antagonists and
; TITLE OF INVENTION: Methods of Activating and Inhibiting G Protein Coupled
; TITLE OF INVENTION: Receptors Using the Same
; FILE REFERENCE: NEMC-215 CIP
; CURRENT APPLICATION NUMBER: US/10/251,703
; CURRENT FILING DATE: 2002-09-20
; PRIOR APPLICATION NUMBER: 09/841,091
; PRIOR FILING DATE: 2001-04-23
; PRIOR APPLICATION NUMBER: 60/198,993
; PRIOR FILING DATE: 2000-04-21
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 18
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Extracellular
; OTHER INFORMATION: Agonist Peptide Sequence
US-10-251-703-18

Query Match 86.5%; Score 77; DB 12; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.4e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNEFWKFTTSC 14

RESULT 4

US-10-101-487-37

; Sequence 37, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
; APPLICANT: BERGMAN, PHILIP A.
; APPLICANT: LOFQUIST, ALAN
; APPLICANT: PIETZ, GREGORY E.
; APPLICANT: TOMPKINS, CHRISTOPHER K.
; APPLICANT: WAGGONER JR., DAVID W.
; TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: 60/277,705
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 37
; LENGTH: 14
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Recognition
; OTHER INFORMATION: motif
US-10-101-487-37

Query Match 86.5%; Score 77; DB 14; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.4e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNEFWKFTTSC 14

RESULT 5

US-10-101-487-52
; Sequence 52, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
; APPLICANT: BERGMAN, PHILIP A.
; APPLICANT: LOFQUIST, ALAN
; APPLICANT: PIETZ, GREGORY E.
; APPLICANT: TOMPKINS, CHRISTOPHER K.
; APPLICANT: WAGGONER JR., DAVID W.
; TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: 60/277,705
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 52
; LENGTH: 15
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
US-10-101-487-52

Query Match 86.5%; Score 77; DB 14; Length 15;
Best Local Similarity 85.7%; Pred. No. 4.7e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 2 AGCKNEFWKFTTSC 15

RESULT 6
US-09-766-396-3
Sequence 3, Application US/09766396
Patent No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-766-396-3
Query Match 86.5%; Score 77; DB 9; Length 110;
Best Local Similarity 85.7%; Pred. No. 0.00027;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 AGCKNFYWKGTSC 14
Db 97 AGCKNFFWKFTTSC 110
RESULT 7
US-10-062-375-3
Sequence 3, Application US/10062375
Publication No. US20020133000A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020133000A1th Torrey Pines Road, TPC-8
CITY: La Jolla

STATE: California
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/062,375
FILING DATE: 30-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-062-375-3
Query Match 86.5%; Score 77; DB 14; Length 110;
Best Local Similarity 85.7%; Pred. No. 0.00027;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 AGCKNFYWKGTSC 14
Db 97 AGCKNFFWKFTTSC 110
RESULT 8
US-09-280-030-64
Sequence 64, Application US/09280030A
Patent No. US20010021515A1
GENERAL INFORMATION:
APPLICANT: Sato, Seiji
APPLICANT: Higashikuni, Naohiko
APPLICANT: Kudo, Toshiyuki
APPLICANT: Kondo, Masaaki
TITLE OF INVENTION: DNAS ENCODING NEW FUSION PROTEINS AND PROCESSES FOR THE
TITLE OF INVENTION: PREPARING USEFUL POLYPEPTIDES THROUGH EXPRESSION OF THE
TITLE OF INVENTION: DNAS
FILE REFERENCE: 382.1026
CURRENT APPLICATION NUMBER: US/09/280,030A
CURRENT FILING DATE: 1999-03-26
EARLIER APPLICATION NUMBER: JP10-87339/1998
EARLIER FILING DATE: 1998-03-31
NUMBER OF SEQ ID NOS: 66
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 64
LENGTH: 140
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Designated is
OTHER INFORMATION: an amino acid sequence of
OTHER INFORMATION: MWPs-MWpmp20-(His)6-EGF-TEV-Somatostatin 28
US-09-280-030-64
Query Match 86.5%; Score 77; DB 9; Length 140;
Best Local Similarity 85.7%; Pred. No. 0.00033;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 127 AGCKNFFWKTFTSC 140

RESULT 9

US-10-101-487-53
; Sequence 53, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
; APPLICANT: BERGMAN, PHILIP A.
; APPLICANT: LOFQUIST, ALAN
; APPLICANT: PIETZ, GREGORY E.
; APPLICANT: TOMPKINS, CHRISTOPHER K.
; APPLICANT: WAGGONER JR., DAVID W.
; TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
; CURRENT FILING DATE: 2002-03-20
; PRIOR APPLICATION NUMBER: 60/277,705
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 53
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic fusion
; OTHER INFORMATION: protein
US-10-101-487-53

Query Match 86.5%; Score 77; DB 14; Length 200;
Best Local Similarity 85.7%; Pred. No. 0.00046;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 187 AGCKNFFWKTFTSC 200

RESULT 10

US-09-766-396-8
; Sequence 8, Application US/09766396
; Patent No. US20020013456A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; de Lecea, Luis
; Siggins, George R.
; Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/766,396
; FILING DATE: 18-Jan-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-766-396-8

Query Match 70.8%; Score 63; DB 9; Length 14;
Best Local Similarity 75.0%; Pred. No. 0.0051;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 3 CKNFYWKGTSC 14
|||||:|||||
Db 2 CKNFFWKTFTSC 13

RESULT 11

US-10-062-375-8
; Sequence 8, Application US/10062375
; Publication No. US20020133000A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; de Lecea, Luis
; Siggins, George R.
; Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 No. US20020133000A1th Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/062,375
; FILING DATE: 30-Jan-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/857,389
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-10-062-375-8

Query Match 70.8%; Score 63; DB 14; Length 14;
Best Local Similarity 75.0%; Pred. No. 0.0051;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 3 CKNFYWKGTSC 14
Db 2 CKNEFWKTFSSC 13

RESULT 12

US-10-221-841-9
; Sequence 9, Application US/10221841
; Publication No. US20030082648A1
GENERAL INFORMATION:
APPLICANT: HINUMA, Shuji
TITLE OF INVENTION: No. US20030082648A1 mas-like Receptor Protein and its DNA
FILE REFERENCE: 2700 USOP
CURRENT APPLICATION NUMBER: US/10/221,841
CURRENT FILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: PCT/JP01/02053
PRIOR FILING DATE: 2001-03-15
PRIOR APPLICATION NUMBER: JP 2000-081835
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: JP 2000-381698
PRIOR FILING DATE: 2000-12-11
NUMBER OF SEQ ID NOS: 9
SEQ ID NO 9
LENGTH: 14
TYPE: PRT
ORGANISM: Rat
US-10-221-841-9

Query Match 70.8%; Score 63; DB 15; Length 14;
Best Local Similarity 75.0%; Pred. No. 0.0051;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 3 CKNFYWKGTSC 14
Db 2 CKNEFWKTFSSC 13

RESULT 13

US-09-766-396-23
; Sequence 23, Application US/09766396
; Patent No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-766-396-23

Query Match 70.8%; Score 63; DB 9; Length 15;
Best Local Similarity 75.0%; Pred. No. 0.0054;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 3 CKNFYWKGTSC 14
Db 3 CKNEFWKTFSSC 14

RESULT 14

US-10-062-375-23
; Sequence 23, Application US/10062375
; Publication No. US20020133000A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020133000A1th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/062,375
FILING DATE: 30-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/857,389
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-10-062-375-23

Query Match 70.8%; Score 63; DB 14; Length 15;
Best Local Similarity 75.0%; Pred. No. 0.0054;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 3 CKNFYWKGTSC 14
Db 3 CKNFFWKTSSC 14

RESULT 15

US-09-766-396-7
; Sequence 7, Application US/09766396
; Patent No. US20020013456A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
; de Lecea, Luis
; Siggins, George R.
; Henriksen, Steven J.
; TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
; COMPOSITIONS AND METHODS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
; STREET: 10666 No. US20020013456A1th Torrey Pines Road, TPC-8
; CITY: La Jolla
; STATE: California
; COUNTRY: US
; ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 29 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-766-396-7

Query Match 70.8%; Score 63; DB 9; Length 29;
Best Local Similarity 75.0%; Pred. No. 0.0096;
Matches 9; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 3 CKNFYWKGTSC 14
Db 17 CKNFFWKTSSC 28

Search completed: August 13, 2003, 14:53:42
Job time : 13.641 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:47:57 ; Search time 8.97436 Seconds
(without alignments)
150.023 Million cell updates/sec

Title: US-09-727-739B-2

Perfect score: 89
Sequence: 1 AGCKNFYWKGTSC 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_76:.*
1: PIR1:.*
2: PIR2:.*
3: PIR3:.*
4: PIR4:.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	89	100.0	25	2 A60842	somatostatin-25 -
2	89	100.0	73	2 S00169	somatostatin II pr
3	89	100.0	74	2 S00166	somatostatin II pr
4	89	100.0	115	2 I51064	somatostatin II pr
5	89	100.0	125	1 RIAFS2	somatostatin II pr
6	79	88.8	25	2 B60840	somatostatin-25 -
7	77	86.5	14	2 C60414	somatostatin - sli
8	77	86.5	14	2 B60842	somatostatin I - C
9	77	86.5	14	2 A60840	somatostatin I - E
10	77	86.5	14	2 S00172	somatostatin I - S
11	77	86.5	28	2 A61322	somatostatin-28 -
12	77	86.5	34	2 A32271	somatostatin-relat
13	77	86.5	92	1 RIFGS	somatostatin I pre
14	77	86.5	114	1 RIIDS1	somatostatin-14 pr
15	77	86.5	114	2 I50798	preprosomatostatin
16	77	86.5	115	2 JC6166	somatostatin-14 pr
17	77	86.5	116	1 RIHUS1	somatostatin I pre
18	77	86.5	116	1 A28968	somatostatin I pre
19	77	86.5	116	1 RIBOS1	somatostatin I pre
20	77	86.5	116	1 RIRTS1	somatostatin precu
21	77	86.5	116	1 RIMSS1	somatostatin precu
22	77	86.5	116	1 S20630	somatostatin precu
23	77	86.5	121	1 RIAFSI	somatostatin I pre
24	73	82.0	37	2 A32000	somatostatin, panc
25	72	80.9	14	2 A60622	somatostatin - spo
26	64	71.9	103	2 JC6167	somatostatin-14 [P
27	63	70.8	112	2 S67489	cortistatin precu
28	60	67.4	105	2 JC5414	cortistatin-like p
29	48	53.9	105	1 RIIDS2	somatostatin-22 pr

conserved hypothet
hypothetical prote
hypothetical prote
hypothetical prote
hypothetical prote
hypothetical prote
superoxide dismuta
chloride channel p
testosterone-resis
endoplasmic reticu
hypothetical prote
serine/threonine k
stationary-phase s
probable polygalac
beta-xylosidase [I
CT085 hypothetical

ALIGNMENTS

RESULT 1

A60842

somatostatin-25 - coho salmon

N;Alternate names: somatostatin II precursor

C;Species: Oncorhynchus kisutch (Coho salmon)

C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999

C;Accession: A60842; C60842

R;Plisetskaya, E.M.; Pollock, H.G.; Rouse, J.B.; Hamilton, J.W.; Kimmel, J.R.; Andre

Gen. Comp. Endocrinol. 63, 252-263, 1986

A;Title: Characterization of Coho salmon (Oncorhynchus kisutch) islet somatostatins.

A;Reference number: A60842; MUID:87055212; PMID:2877919

A;Accession: A60842

A;Molecule type: protein

A;Residues: 1-25 <PLI>

A;Accession: C60842

A;Molecule type: protein

A;Residues: 12-25 <PL2>

A;Note: this form, somatostatin II, was not sequenced directly but rather deduced fr

C;Superfamily: somatostatin

C;Keywords: hormone; pancreatic islet

F;1-25/Product: somatostatin-25 #status experimental <MAT1>

F;12-25/Product: somatostatin II #status experimental <MAT2>

Query Match 100.0%; Score 89; DB 2; Length 25;

Best Local Similarity 100.0%; Pred. No. 1.4e-07;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14

|||||

Db 12 AGCKNFYWKGTSC 25

RESULT 2

S00169

somatostatin II precursor - European flounder (tentative sequence) (fragments)

C;Species: Platichthys flesus (European flounder)

C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 31-Mar-2000

C;Accession: S00169

R;Conlon, J.M.; Davis, M.S.; Falkner, S.; Thim, L.

Eur. J. Biochem. 168, 647-652, 1987

A;Title: Structural characterization of peptides derived from prosomatostatins I and

A;Reference number: S00166; MUID:88029486; PMID:2889597

A;Accession: S00169

A;Molecule type: protein

A;Residues: 1-10;11-45;46-73 <CON>

A;Note: three peptides which probably originate from a common precursor, were isolat

C;Superfamily: somatostatin

C;Keywords: glycoprotein; neuropeptide; pancreatic islet

F;1-10/Product: peptide F1 #status experimental <PF1>

F;11-45/Product: peptide F3 #status experimental <PF3>

F;46-73/Product: peptide F2 #status experimental <PF2>

F;62-73/Disulfide bonds: #status experimental

Query Match 100.0%; Score 89; DB 2; Length 73;
Best Local Similarity 100.0%; Pred. No. 3.7e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 60 AGCKNFYWKGTSC 73

RESULT 3
S00166
somatostatin II precursor - shorthorn sculpin (tentative sequence) (fragments)
C:Species: Myoxocephalus scorpius (shorthorn sculpin, daddy sculpin)
C:Date: 07-Sep-1990 #sequence_revision 26-Jan-1996 #text_change 31-Mar-2000
C:Accession: S00166; A26993
R:Conlon, J.M.; Davis, M.S.; Falkmer, S.; Thim, L.
Eur. J. Biochem. 168, 647-652, 1987
A:Title: Structural characterization of peptides derived from prosomatostatins I and II
A:Reference number: S00166; MUID:88029486; PMID:2889597
A:Accession: S00166
A:Molecule type: protein
A:Residues: 1-12;13-46;47-74 <CON>
A>Note: three peptides which probably originate from a common precursor, were isolated from
R:Cutfield, S.M.; Carne, A.; Cutfield, J.F.
FEBS Lett. 214, 57-61, 1987
A:Title: The amino-acid sequences of sculpin islet somatostatin-28 and peptide YY.
A:Reference number: A91376; MUID:87190954; PMID:2883025
A:Accession: A26993
A:Molecule type: protein
A:Residues: 47-74 <CUT>
C:Superfamily: somatostatin
C:Keywords: glycoprotein; neuropeptide; pancreatic islet
F;1-12/Product: peptide S1 #status experimental <PS1>
F;13-46/Product: peptide S4 #status experimental <PS2>
F;47-74/Product: peptide S2 #status experimental <PS3>
F;63-74/Disulfide bonds: #status experimental

Query Match 100.0%; Score 89; DB 2; Length 74;
Best Local Similarity 100.0%; Pred. No. 3.8e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 61 AGCKNFYWKGTSC 74

RESULT 4
I51064
somatostatin II precursor - rainbow trout
C:Species: Oncorhynchus mykiss (rainbow trout)
C:Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C:Accession: I51064
R:Moore, C.A.; Kittilson, J.D.; Dahl, S.K.; Sheridan, M.A.
Gen. Comp. Endocrinol. 98, 253-261, 1995
A:Title: Isolation and characterization of a cDNA encoding for preprosomatostatin contain
A:Reference number: I51064; MUID:95354921; PMID:7628684
A:Accession: I51064
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-115 <MOO>
A:Cross-references: EMBL:U32471; NID:9975344; PIDN:AAC59695.1; PID:9975345
C:Superfamily: somatostatin

Query Match 100.0%; Score 89; DB 2; Length 115;
Best Local Similarity 100.0%; Pred. No. 5.7e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 102 AGCKNFYWKGTSC 115

RESULT 5
RIAFS2
somatostatin II precursor - American goosefish
C:Species: Lopholius americanus (American goosefish)
C:Date: 31-Mar-1981 #sequence_revision 31-Mar-1981 #text_change 28-May-1999
C:Accession: B93236; A94038; A27376; A01434; A21881; A93236
R:Hobart, P.; Crawford, R.; Shen, L.; Pictet, R.; Rutter, W.J.
Nature 288, 137-141, 1980
A:Title: Cloning and sequence analysis of cDNAs encoding two distinct somatostatin p
A:Reference number: A93236; MUID:81052423; PMID:6107860
A:Accession: B93236
A:Molecule type: mRNA
A:Residues: 1-125 <HOB>
A:Cross-references: GB:V00641; GB:J00947; GB:M23199; NID:964030; PIDN:CAA23987.1; PI
A:Experimental source: islet tissue (endocrine pancreas)
R:Spless, J.; Noe, B.D.
Proc. Natl. Acad. Sci. U.S.A. 82, 277-281, 1985
A:Title: Processing of an anglerfish somatostatin precursor to a hydroxylysine-conta
A:Reference number: A94038; MUID:85113184; PMID:2857489
A:Accession: A94038
A:Molecule type: protein
A:Residues: 98-125 <SPI>
R:Andrews, P.C.; Nichols, R.; Dixon, J.E.
J. Biol. Chem. 262, 12692-12699, 1987
A:Title: Post-translational processing of preprosomatostatin-II examined using fast
A:Reference number: A27376; MUID:87308304; PMID:2887572
A:Accession: A27376
A:Molecule type: protein
A:Residues: 1-76,'DV',79-89,'G',91-125 <AND>
C:Superfamily: somatostatin
C:Keywords: hydroxylysine; neuropeptide; pyroglutamic acid
F;1-24/Domain: signal sequence #status experimental <SIG>
F;25-97/Domain: propeptide #status experimental <PRO>
F;97-125/Product: somatostatin II #status experimental <MAT>
F;25/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status exper
F;114-125/Disulfide bonds: #status experimental
F;120/Modified site: hydroxylysine (Lys) #status experimental

Query Match 100.0%; Score 89; DB 1; Length 125;
Best Local Similarity 100.0%; Pred. No. 6.2e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 112 AGCKNFYWKGTSC 125

RESULT 6
B60840
somatostatin-25 - European eel
N:Alternate names: somatostatin II precursor
C:Species: Anguilla anguilla (European eel)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 20-Mar-1998
C:Accession: B60840
R:Conlon, J.M.; Deacon, C.F.; Hazon, N.; Henderson, I.W.; Thim, L.
Gen. Comp. Endocrinol. 72, 181-189, 1988
A:Title: Somatostatin-related and glucagon-related peptides with unusual structural
A:Reference number: A60840; MUID:89065329; PMID:2904391
A:Accession: B60840
A:Molecule type: protein
A:Residues: 1-25 <CON>
C:Superfamily: somatostatin
C:Keywords: hormone; hydroxylysine; pancreatic islet
F;20/Modified site: 5-hydroxylysine (Lys) (partial) #status experimental

Query Match 88.8%; Score 79; DB 2; Length 25;
Best Local Similarity 92.9%; Pred. No. 5e-06;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 12 AGCKNFYWKGTSC 25

RESULT 7

C60414
somatostatin - slider turtle
C:Species: Pseudemys scripta (slider)
C:Date: 11-Feb-1993 #sequence_revision 11-Feb-1993 #text_change 31-Dec-1993
C:Accession: C60414
R:Conlon, J.M.; Hicks, J.W.
Peptides 11, 461-466, 1990
A:Title: Isolation and structural characterization of insulin, glucagon and somatostatin
A:Reference number: A60414; MUID:90341082; PMID:1974347
A:Accession: C60414
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-14 <CON>
A:Superfamily: somatostatin
C:Keywords: neuropeptide

Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 6e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKTFTSC 14

RESULT 8

B60842
somatostatin I - coho salmon
C:Species: Oncorhynchus kisutch (coho salmon)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C:Accession: B60842
R:Plisetkaya, E.M.; Pollock, H.G.; Rouse, J.B.; Hamilton, J.W.; Kimmel, J.R.; Andrews, Gen. Comp. Endocrinol. 63, 252-263, 1986
A:Title: Characterization of Coho salmon (Oncorhynchus kisutch) islet somatostatins.
A:Reference number: A60842; MUID:87055212; PMID:2877919
A:Accession: B60842
A:Molecule type: protein
A:Residues: 1-14 <PLI>
A:Superfamily: somatostatin
C:Keywords: hormone; pancreatic islet

Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 6e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKTFTSC 14

RESULT 9

A60840
somatostatin I - European eel
N:Alternate names: somatostatin-14
C:Species: Anguilla anguilla (European eel)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 20-Mar-1998
C:Accession: A60840
R:Conlon, J.M.; Deacon, C.F.; Hazon, N.; Henderson, I.W.; Thim, L.
Gen. Comp. Endocrinol. 72, 181-189, 1988
A:Title: Somatostatin-related and glucagon-related peptides with unusual structural features
A:Reference number: A60840; MUID:89065329; PMID:2904391
A:Accession: A60840
A:Molecule type: protein
A:Residues: 1-14 <CON>
A:Superfamily: somatostatin
C:Keywords: hormone; pancreatic islet

Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 6e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKTFTSC 14

RESULT 10

S00172
somatostatin I - shorthorn sculpin
C:Species: Myoxocephalus scorpius (shorthorn sculpin, daddy sculpin)
C:Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 31-Dec-1993
C:Accession: S00172
R:Conlon, J.M.; Davis, M.S.; Falkmer, S.; Thim, L.
Eur. J. Biochem. 168, 647-652, 1987
A:Title: Structural characterization of peptides derived from prosomatostatins I and II
A:Reference number: S00166; MUID:88029486; PMID:2889597
A:Accession: S00172
A:Molecule type: protein
A:Residues: 1-14 <CON>
A:Note: the source is designated as Cottus scorpius
C:Superfamily: somatostatin
C:Keywords: neuropeptide; pancreatic islet

Query Match 86.5%; Score 77; DB 2; Length 14;
Best Local Similarity 85.7%; Pred. No. 6e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 1 AGCKNFFWKTFTSC 14

RESULT 11

A61322
somatostatin-28 - sheep
N:Contains: somatostatin-14
C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C:Date: 17-Jul-1994 #sequence_revision 17-Jul-1994 #text_change 07-May-1999
C:Accession: A61322; A61344
R:Spies, J.; Villarreal, J.; Vale, W.
Biochemistry 20, 1982-1988, 1981
A:Title: Isolation and sequence analysis of a somatostatin-like polypeptide from ovine
A:Reference number: A61322; MUID:81184502; PMID:7225368
A:Accession: A61322
A:Molecule type: protein
A:Residues: 1-28 <SPI>
R:Burgus, R.; Ling, N.; Butcher, M.; Guillemin, R.
Proc. Natl. Acad. Sci. U.S.A. 70, 684-688, 1973
A:Title: Primary structure of somatostatin, a hypothalamic peptide that inhibits the
A:Reference number: A61344; MUID:73209562; PMID:4514982
A:Accession: A61344

A:Molecule type: protein
A:Residues: 15-28 <BUR>
C:Superfamily: somatostatin
C:Keywords: neuropeptide
F:1-28/Product: somatostatin-28 #status experimental <S28>
F:15-28/Product: somatostatin-14 #status experimental <S14>
F:17-28/Disulfide bonds: #status experimental

Query Match 86.5%; Score 77; DB 2; Length 28;
Best Local Similarity 85.7%; Pred. No. 1.1e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 15 AGCKNFFWKTFTSC 28

RESULT 12

A32271
somatostatin-related protein - Atlantic hagfish
C:Species: Myxine glutinosa (Atlantic hagfish)
C:Date: 21-May-1990 #sequence_revision 21-May-1990 #text_change 31-Dec-1993

C;Accession: A32271
R;Conlon, J.M.; Askensten, U.; Falkmer, S.; Thim, L.
Endocrinology 122, 1855-1859, 1988
A;Title: Primary structures of somatostatins from the islet organ of the hagfish suggest
A;Reference number: A32271; MUID:88195948; PMID:2896118
A;Accession: A32271
A;Molecule type: protein
A;Residues: 1-34 <CON>
C;Superfamily: somatostatin
C;Keywords: neuropeptide

Query Match 86.5%; Score 77; DB 2; Length 34;
Best Local Similarity 85.7%; Pred. No. 1.4e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 21 AGCKNFFWKFTSC 34

RESULT 13

RIPGS

somatostatin I precursor - pig (fragment)
N;Alternate names: prosomatostatin
A;Contains: somatostatin 14 (SS-14); somatostatin 28 (SS-28)
A;Species: Sus scrofa domestica (domestic pig)
C;Date: 30-Nov-1980 #sequence_revision 31-Jan-1997 #text_change 31-Jan-1997
C;Accession: A34109; A24222; A91273; A93854; A90398; S13616; A01432
R;Bersani, M.; Thim, L.; Baldissera, F.G.A.; Holst, J.J.
J. Biol. Chem. 264, 10633-10636, 1989
A;Title: Prosomatostatin 1-64 is a major product of somatostatin gene expression in pancreas
A;Reference number: A34109; MUID:89278131; PMID:2567292
A;Accession: A34109
A;Molecule type: protein
A;Residues: 1-64 <BER>
R;Schmidt, W.E.; Mutt, V.; Kratzin, H.; Carlquist, M.; Conlon, J.M.; Creutzfeldt, W.
FEBS Lett. 192, 141-146, 1985
A;Title: Isolation and characterization of proSS1-32, a peptide derived from the N-terminal
A;Reference number: A24222; MUID:86030691; PMID:2865169
A;Accession: A24222
A;Molecule type: protein
A;Residues: 1-32 <SC3>
R;Pradayrol, L.; Jornvall, H.; Mutt, V.; Ribet, A.
FEBS Lett. 109, 55-58, 1980
A;Title: N-terminally extended somatostatin: the primary structure of somatostatin-28.
A;Reference number: A91273; MUID:80113258; PMID:7353633
A;Accession: A91273
A;Molecule type: protein
A;Residues: 65-92 <PRA>
R;Schally, A.V.; Huang, W.Y.; Chang, R.C.C.; Arimura, A.; Redding, T.W.; Millar, R.P.; H
Proc. Natl. Acad. Sci. U.S.A. 77, 4489-4493, 1980
A;Title: Isolation and structure of pro-somatostatin: a putative somatostatin precursor
A;Reference number: A93854; MUID:81054799; PMID:6107906
A;Accession: A93854
A;Molecule type: protein
A;Residues: 65-92 <SCR>
R;Schally, A.V.; Dupont, A.; Arimura, A.; Redding, T.W.; Nishi, N.; Linthicum, G.L.; Sch
Biochemistry 15, 509-514, 1976
A;Title: Isolation and structure of somatostatin from porcine hypothalamus.
A;Reference number: A90398; MUID:76136331; PMID:1252409
A;Accession: A90398
A;Molecule type: protein
A;Residues: 79-92 <SC2>
R;Bersani, M.; Johnsen, A.H.; Holst, J.J.
FEBS Lett. 279, 237-239, 1991
A;Title: Oxidation/reduction explains heterogeneity of pancreatic somatostatin.
A;Reference number: S13616; MUID:91160722; PMID:1672110
A;Accession: S13616
A;Molecule type: protein
A;Residues: 79-92 <BE2>

C;Comment: Somatostatin inhibits the release of somatotropin.
C;Superfamily: somatostatin
C;Keywords: hormone; hypothalamus; intestine; neuropeptide
F;1-64/Domain: propeptide #status experimental <PRO>
F;65-92/Product: somatostatin-28 #status experimental <W28>
F;79-92/Product: somatostatin-14 #status experimental <M14>
F;37/Binding site: carbohydrate (Asn) (covalent) #status absent
F;81-92/Disulfide bonds: #status experimental

Query Match 86.5%; Score 77; DB 1; Length 92;
Best Local Similarity 85.7%; Pred. No. 3.5e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 79 AGCKNFFWKFTSC 92

RESULT 14

RIIDS1

somatostatin-14 precursor - channel catfish
N;Alternate names: somatostatin I
A;Contains: somatostatin-14
C;Species: Ictalurus punctatus (channel catfish)
C;Date: 30-Jun-1980 #sequence_revision 31-Dec-1993 #text_change 18-Jun-1999
C;Accession: S00292; A93897; A92334; A01435
R;Minth, C.D.; Taylor, W.L.; Magazin, M.; Tavlanini, M.A.; Collier, K.; Weith, H.L.;
J. Biol. Chem. 257, 10372-10377, 1982
A;Title: The structure of cloned DNA complementary to catfish pancreatic somatostatin.
A;Reference number: S00292; MUID:82265698; PMID:6179939
A;Accession: S00292
A;Molecule type: mRNA
A;Residues: 1-114 <MIN>
A;Cross-references: EMBL:V00607; NID:964017; PIDN:CAA23877.1; PID:964018
R;Taylor, W.L.; Collier, K.J.; Deschenes, R.J.; Weith, H.L.; Dixon, J.E.
Proc. Natl. Acad. Sci. U.S.A. 78, 6694-6698, 1981
A;Title: Sequence analysis of a cDNA coding for a pancreatic precursor to somatostatin
A;Reference number: A93897; MUID:82082515; PMID:6171821
A;Accession: A93897
A;Molecule type: mRNA
A;Residues: 82-108 <TAY>
A;Cross-references: GB:J00944
R;Andrews, P.C.; Dixon, J.E.
J. Biol. Chem. 256, 8267-8270, 1981
A;Title: Isolation and structure of a peptide hormone predicted from a mRNA sequence
A;Reference number: A92334; MUID:81264223; PMID:6114953
A;Accession: A92334
A;Molecule type: protein
A;Residues: 101-114 <AND>
C;Superfamily: somatostatin
C;Keywords: neuropeptide
F;1-24/Domain: signal sequence #status predicted <SIG>
F;25-100/Domain: propeptide #status predicted <PRO>
F;101-114/Product: somatostatin-14 #status experimental <MAT>
F;103-114/Disulfide bonds: #status experimental

Query Match 86.5%; Score 77; DB 1; Length 114;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGCKNFYWKGTSC 14
|||||:|||||
Db 101 AGCKNFFWKFTSC 114

RESULT 15

I50798

preprosomatostatin SS-14 - channel catfish
C;Species: Ictalurus punctatus (channel catfish)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Accession: I50798
R;Dixon, J.E.; Andrews, P.C.
Adv. Exp. Med. Biol. 188, 19-29, 1985

A;Title: Somatostatins of the channel catfish.
A;Reference number: I50798; MUID:85303576; PMID:2863931
A;Accession: I50798
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-114 <DIX>
A;Cross-references: GB:M25903; NID:g213339; PIDN:AAA49339.1; PID:g213340
C;Superfamily: somatostatin

Query Match 86.5%; Score 77; DB 2; Length 114;
Best Local Similarity 85.7%; Pred. No. 4.3e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKFTSC 14
|||||:|||||
Db 101 AGCKNFFWKFTSC 114

Search completed: August 13, 2003, 14:51:51
Job time : 9.97436 secs

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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:47:17 ; Search time 5.38462 Seconds
(without alignments)
122.269 Million cell updates/sec

Title: US-09-727-739B-2
Perfect score: 89
Sequence: 1 AGCKNFYWKGTSC 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	89	100.0	73	1 SMS2_PLAFA	P21780 platichthys
2	89	100.0	74	1 SMS2_MYOSC	P09876 myoxocephal
3	89	100.0	115	1 SMS2_ONCMY	Q91194 oncorhynchu
4	89	100.0	125	1 SMS2_LOPAM	P01170 lophius ame
5	85	95.5	120	1 SMS2_CARAU	Q9ygh4 carassius a
6	83	93.3	28	1 SMS2_ORENI	P81029 myoxochromis
7	77	86.5	14	1 SMS1_MYOSC	P20750 myoxocephal
8	77	86.5	14	1 SMS1_ALIMI	P31885 alligator m
9	77	86.5	26	1 SMS1_AMICA	Q9prz6 amia calva
10	77	86.5	34	1 SMS1_MXGL	P19209 myxine glut
11	77	86.5	92	1 SMS1_PIG	P01168 sus scrofa
12	77	86.5	114	1 SMS1_ICTPU	P01171 ictalurus p
13	77	86.5	114	1 SMS1_CARAU	Q9ygh5 carassius a
14	77	86.5	115	1 SMS1_PROAN	Q9W7f0 protopterus
15	77	86.5	115	1 SMS1_RANRI	P87384 rana ridibu
16	77	86.5	116	1 SMS1_BOVIN	P26917 bos taurus
17	77	86.5	116	1 SMS1_CANFA	P49670 canis famil
18	77	86.5	116	1 SMS1_CHICK	P33094 gallus gall
19	77	86.5	116	1 SMS1_HUMAN	P01166 homo sapien
20	77	86.5	116	1 SMS1_MOUSE	P01167 mus musculu
21	77	86.5	116	1 SMS1_SHEEP	O46688 ovis aries
22	77	86.5	121	1 SMS1_LOPAM	P01169 lophius ame
23	73	82.0	35	1 SMS1_LAMFL	Q9prro lampetra fl
24	73	82.0	37	1 SMS1_PETMA	P21779 petromyzon
25	69	77.5	109	1 SMS2_PROAN	Q9W7e9 protopterus
26	69	77.5	111	1 SMSB_CARAU	Q9ygh3 carassius a
27	64	71.9	103	1 SMS2_RANRI	P87385 rana ridibu
28	63	70.8	109	1 CORT_MOUSE	P56469 mus musculu
29	63	70.8	112	1 CORT_RAT	Q62949 rattus norv
30	60	67.4	105	1 CORT_HUMAN	O00230 homo sapien
31	48	53.9	105	1 SMS2_ICTPU	P01172 ictalurus p
32	45	50.6	147	1 YGDK_ECOLI	Q46926 escherichia
33	45	50.6	234	1 RK1_GUITH	O78413 guillardia

34	42	47.2	479	1	S61A_SCHPO	P79088 schizosacch
35	41	46.1	263	1	SURE_CAUCR	Q9a6t5 caulobacter
36	41	46.1	306	1	BSS4_MOUSE	Q9er10 mus musculu
37	41	46.1	421	1	PGLR_MEDSA	Q40312 medicago sa
38	41	46.1	584	1	Y328_CHLPN	Q9z810 chlamydia p
39	40	44.9	302	1	PP12_DROME	P12982 drosophila
40	40	44.9	302	1	PP13_DROME	Q05547 drosophila
41	40	44.9	308	1	PP1_NEUCR	Q05547 drosophila
42	40	44.9	311	1	PP12_RABIT	Q05547 drosophila
43	40	44.9	312	1	PP12_YEAST	P08128 oryctolagus
44	40	44.9	319	1	PP11_ACECL	P32598 saccharomyc
45	40	44.9	319	1	PP12_ACECL	P48480 acetabulari
						P48481 acetabulari

ALIGNMENTS

RESULT 1
SMS2_PLAFA
ID SMS2_PLAFA STANDARD; PRT; 73 AA.
AC P21780;
DT 01-MAY-1991 (Rel. 18, Created)
DT 01-MAY-1991 (Rel. 18, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14] (Fragments).
OS Platichthys flesus (European flounder).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
OC Pleuronectidae; Pleuronectidae; Platichthys.
OX NCBI_TaxID=8260;
RN [1]
RP SEQUENCE.
RC TISSUE=Pancreas;
RX MEDLINE=88029486; PubMed=2889597;
RA Conlon J.M., Davis M.S., Falkner S., Thim L.;
RT "Structural characterization of peptides derived from
RT prosomatostatins I and II isolated from the pancreatic islets of two
RT species of teleostean fish: the daddy sculpin and the flounder.";
RL Eur. J. Biochem. 168:647-652(1987).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR; S00169; S00169.
KW Cleavage on pair of basic residues; Hormone; Multigene family.
FT NON_TER 1
FT NON_CONS 10 11
FT NON_CONS 45 46
FT PEPTIDE 46 73
FT PEPTIDE 60 73
FT DISULFID 62 73
SQ SEQUENCE 73 AA; 7989 MW; CCCBA6B30DCB29BB CRC64;
[Tyr21,Gly24]SOMATOSTATIN-28.
[Tyr7,Gly10]SOMATOSTATIN-14.

Query Match 100.0%; Score 89; DB 1; Length 73;
Best Local Similarity 100.0%; Pred. No. 3.1e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 60 AGCKNFYWKGTSC 73

RESULT 2
SMS2_MYOSC
ID SMS2_MYOSC STANDARD; PRT; 74 AA.
AC P09876;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14] (Fragments).
OS Myoxocephalus scorpius (Shorthorn sculpin) (Daddy sculpin).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Scorpaeniformes;
OC Cottoidei; Cottidae; Myoxocephalus.
OX NCBI_TaxID-8097;
RN [1]
RP SEQUENCE.
RC TISSUE-Pancreas;
RX MEDLINE-88029486; PubMed-2889597;
RA Conlon J.M., Davis M.S., Falkner S., Thim L.;
RT "Structural characterization of peptides derived from
RT prosomatostatin I and II isolated from the pancreatic islets of two
RT species of teleostean fish: the daddy sculpin and the flounder.";
RL Eur. J. Biochem. 168:647-652(1987).
RN [2]
RP SEQUENCE OF 47-74.
RC TISSUE-Pancreas;
RX MEDLINE-87190954; PubMed-2883025;
RA Cutfield S.M., Carne A., Cutfield J.F.;
RT "The amino-acid sequences of sculpin islet somatostatin-28 and
RT peptide YY.";
RL FEBS Lett. 214:57-61(1987).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
C -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR; S00166; S00166.
KW Cleavage on pair of basic residues; Hormone; Multigene family.
FT NON_TER 1
FT NON_CONS 12 13
FT NON_CONS 46 47
FT PEPTIDE 47 74 [TYR21, GLY24]SOMATOSTATIN-28.
FT PEPTIDE 61 74 [TYR7, GLY10]SOMATOSTATIN-14.
FT DISULFID 63 74
SQ SEQUENCE 74 AA; 8036 MW; 6864A59A3FA72C47 CRC64;

Query Match 100.0%; Score 89; DB 1; Length 74;
Best Local Similarity 100.0%; Pred. No. 3.2e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 61 AGCKNFYWKGTSC 74
|||||

RESULT 3
SMS2_ONCMY STANDARD; PRT; 115 AA.
ID Q91194;
AC Q91194;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
E [Tyr7,Gly10]somatostatin-14].
S Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX NCBI_TaxID-8022;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-95354921; PubMed-7628684;
RA Moore C.A., Kittilson J.D., Dahl S.K., Sheridan M.A.;
RT "Isolation and characterization of a cDNA encoding for
RT prosomatostatin containing [Tyr7, Gly10]-somatostatin-14 from the
RT endocrine pancreas of rainbow trout, Oncorhynchus mykiss.";
RL Gen. Comp. Endocrinol. 98:253-261(1995).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
CC
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CC -----
DR EMBL; U32471; AAC59695.1;
DR PIR; I51064; I51064.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal; Multigene family.
FT SIGNAL 1 18 POTENTIAL.
FT PROPEP 19 87 POTENTIAL.
FT PEPTIDE 88 115 [TYR21, GLY24]SOMATOSTATIN-28 (POTENTIAL).
FT PEPTIDE 102 115 [TYR7, GLY10]SOMATOSTATIN-14.
FT DISULFID 104 115 BY SIMILARITY.
SQ SEQUENCE 115 AA; 12963 MW; 520595025FCA6D91 CRC64;

Query Match 100.0%; Score 89; DB 1; Length 115;
Best Local Similarity 100.0%; Pred. No. 4.8e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 102 AGCKNFYWKGTSC 115
|||||

RESULT 4
SMS2_LOPAM STANDARD; PRT; 125 AA.
ID P01170; Q91066;
AC P01170; Q91066;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-OCT-1989 (Rel. 12, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr7,Gly10]somatostatin-14].
OS Lophius americanus (American goosefish) (Anglerfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC Acanthomorpha; Paracanthopterygii; Lophiiformes; Lophiidae; Lophius.
OX NCBI_TaxID-8073;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-81052423; PubMed-6107860;
RA Hobart P.M., Crawford R., Shen L., Pictet R., Rutter W.J.;
RT "Cloning and sequence analysis of cDNAs encoding two distinct
RT somatostatin precursors found in the endocrine pancreas of
RT anglerfish.";
RL Nature 288:137-141(1980).
RN [2]
RP PARTIAL SEQUENCE, AND HYDROXYLATION.
RX MEDLINE-87308304; PubMed-2887572;
RA Andrews P.C., Nichols R., Dixon J.E.;
RT "Post-translational processing of preprosomatostatin-II examined
RT using fast atom bombardment mass spectrometry.";
RL J. Biol. Chem. 262:12692-12699(1987).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- MISCELLANEOUS: SOMATOSTATIN II MAY HAVE A DIFFERENT DEGREE OF
CC ACTIVITY OR A DIFFERENT TYPE OF TARGET CELL FROM SOMATOSTATIN I.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
CC
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; V00641; CAA33987.1;
DR PIR; B93236; RIAFS2.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal; Hydroxylation;

KW Multigene family. 24
FT SIGNAL 1
FT PROPEP 25
FT PEPTIDE 109
FT DISULFID 112
FT MOD_RES 125
FT CONFLICT 125
FT CONFLICT 125
FT SEQUENCE 125
Query Match 100.0%; Score 89; DB 1; Length 125;
Best Local Similarity 100.0%; Pred. No. 5.2e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 AGCKNFYWKGTSC 14
DB 112 AGCKNFYWKGTSC 125

RESULT 5
SMS2_CARAU STANDARD; PRT; 120 AA.
AC Q9YGH4; Q9PTU2;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14].
OS Carassius auratus (Goldfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Carassius.
OX NCBI_TaxID=7957;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Lin X.-W., Peter R.E.;
RT "Cloning and characterization of cDNAs encoding preprosomatostatin-I
and -II from goldfish brain."
RL Submitted (JUN-1996) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Liver;
RA Otto C.J., Peter R.E.;
RT "The expression of SRIF mRNA in the brain of goldfish."
RL Submitted (SEP-1997) to the EMBL/GenBank/DBJ databases.
CC -I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -J- SUBCELLULAR LOCATION: Secreted.
CC -I- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

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KW EMBL; U60262; AAD09626.1;
DR EMBL; AF025686; AAF15306.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Signal; Multigene family.
FT SIGNAL 23
FT PROPEP 24
FT PEPTIDE 93
FT PEPTIDE 107
FT DISULFID 109
FT CONFLICT 51
FT SEQUENCE 120
Query Match 95.5%; Score 85; DB 1; Length 120;
Best Local Similarity 100.0%; Pred. No. 2e-06;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2 GCKNFYWKGTSC 14
DB 108 GCKNFYWKGTSC 120
RESULT 6
SMS2_ORENI STANDARD; PRT; 28 AA.
AC P81029;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14] (fragment).
OS Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidel;
OC Cichlidae; Oreochromis.
OX NCBI_TaxID=8128;
RN [1]
RP SEQUENCE.
RX MEDLINE-95384941; PubMed-7656183;
RA Nguyen T.M., Wright J.R. Jr., Nielsen P.F., Conlon J.M.;
RT "Characterization of the pancreatic hormones from the Brockmann body
of the tilapia: implications for islet xenograft studies."
RL Comp. Biochem. Physiol. 111C:33-44(1995).
CC -I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -J- SUBCELLULAR LOCATION: Secreted.
CC -I- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Multigene family.
FT NON_TER 1
FT PEPTIDE 1 28 [Tyr21, Gly24]SOMATOSTATIN-28.
FT PEPTIDE 15 28 [Tyr7, Gly10]SOMATOSTATIN-14.
FT DISULFID 17 28
SQ SEQUENCE 28 AA; 3155 MW; 47C049F4866EF4AC CRC64;
Query Match 93.3%; Score 83; DB 1; Length 28;
Best Local Similarity 92.9%; Pred. No. 1.1e-06;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1 AGCKNFYWKGTSC 14
DB 15 AGCKNFYWKGLTSC 28

RESULT 7
SMS1_MYOSC STANDARD; PRT; 14 AA.
ID SMS1_MYOSC
AC P20750;
DT 01-FEB-1991 (Rel. 17, Created)
DT 01-FEB-1991 (Rel. 17, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin I.
OS Myoxocephalus scorpius (Shorthorn sculpin) (Daddy sculpin),
OS Oncorhynchus kisutch (Coho salmon), and
OS Anguilla anguilla (European freshwater eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Scorpaeniformes;
OC Cottidae; Cottidae; Myoxocephalus.
OX NCBI_TaxID=8097, 8019, 7936;
RN [1]
RP SEQUENCE.
RC SPECIES=M.scorpius; TISSUE=pancreas;
RX MEDLINE=88029486; PubMed=2889597;
RA Conlon J.M., Davis M.S., Falkner S., Thim L.;
RT "Structural characterization of peptides derived from
prosomatostatins I and II isolated from the pancreatic islets of two

RT species of teleostean fish: the daddy sculpin and the flounder.";
RL Eur. J. Biochem. 168:647-652(1987).
RN [2]
RP SEQUENCE.
RX SPECIES-O.kisutch; TISSUE-Pancreas;
RA MEDLINE-87055212; PubMed-2877919;
RA Plisetskaya E.M.; Pollock H.G.; Rouse J.B.; Hamilton J.W.,
RA Kimmel J.R.; Andrews P.C.; Gorbman A.;
RT "Characterization of coho salmon (Oncorhynchus kisutch) islet
RT somatostatins.";
RL Gen. Comp. Endocrinol. 63:252-263(1986).
RN [3]
RP SEQUENCE.
RX SPECIES-A.anguilla; TISSUE-Pancreas;
RA MEDLINE-89065329; PubMed-2904391;
RA Conlon J.M.; Deacon C.F.; Hazon N.; Henderson I.W.; Thim L.;
RT "Somatostatin-related and glucagon-related peptides with unusual
RT structural features from the European eel (Anguilla anguilla).";
RL Gen. Comp. Endocrinol. 72:181-189(1988).
CC -I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -I- SUBCELLULAR LOCATION: Secreted.
CC -I- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR; A60840; A60840.
DR PIR; B60842; B60842.
DR PIR; S00172; S00172.
R InterPro; IPR004250; Somatostatin.
R Pfam; PF03002; Somatostatin; 1.
KW Hormone; Multigene family.
FT DISULFID 3 14
SQ SEQUENCE 14 AA; 1640 MW; D6270F5C09682679 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.5e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 1 AGCKNFYWKGTSC 14

RESULT 8
SMS_ALLMI
ID SMS_ALLMI STANDARD; PRT; 14 AA.
AC P31885;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUL-1993 (Rel. 26, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin-14.
OS Alligator mississippiensis (American alligator)., and
OS Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archosauria; Crocodylidae; Alligatorinae; Alligator.
OX NCBI_TaxID=8496, 34903;
RN [1]
RP SEQUENCE.
RX SPECIES-A.mississippiensis; TISSUE-Stomach;
RA MEDLINE-93324451; PubMed-8101369;
RA Wang Y.; Conlon J.M.;
RT "Neuroendocrine peptides (NPY, GRP, VIP, somatostatin) from the brain
RT and stomach of the alligator.";
RL Peptides 14:573-579(1993).
RN [2]
RP SEQUENCE.
RX SPECIES-T.scripta;
RA MEDLINE-90341082; PubMed-1974347;
RA Conlon J.M.; Hicks J.W.;
RT "Isolation and structural characterization of insulin, glucagon and
RT somatostatin from the turtle, Pseudemys scripta.";
RL Peptides 11:461-466(1990).
CC -I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -I- SUBCELLULAR LOCATION: Secreted.
CC -I- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR; C60414; C60414.

DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Hormone.
FT DISULFID 3 14
SQ SEQUENCE 14 AA; 1640 MW; D6270F5C09682679 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 4.5e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 1 AGCKNFYWKGTSC 14

RESULT 9
SMSI_AMICA
ID SMSI_AMICA STANDARD; PRT; 26 AA.
AC Q9PRZ6;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin I precursor [Contains: Somatostatin 26; Somatostatin-14]
(Fragment).
OS Amia calva (Bowfin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Amlifformes; Amlidae; Amia.
OX NCBI_TaxID=7924;
RN [1]
RP SEQUENCE.
RX TISSUE-Pancreas;
RC MEDLINE-94023232; PubMed-8105513;
RA Wang Y.; Youson J.H.; Conlon J.M.;
RT "Prosomatostatin-I is processed to somatostatin-26 and somatostatin-14
RT in the pancreas of the bowfin, Amia calva.";
RL Regul. Pept. 47:33-39(1993).
CC -I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -I- SUBCELLULAR LOCATION: Secreted.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Multigene family.
FT NON_TER 1 1
FT PEPTIDE 1 26
FT PEPTIDE 13 26
FT DISULFID 15 26
SQ SEQUENCE 26 AA; 2931 MW; 8A296DC3710552FE CRC64;

Query Match 86.5%; Score 77; DB 1; Length 26;
Best Local Similarity 85.7%; Pred. No. 8.1e-06;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 13 AGCKNFYWKGTSC 26

RESULT 10
SMS_MYXGL
ID SMS_MYXGL STANDARD; PRT; 34 AA.
AC P19209;
DT 01-NOV-1990 (Rel. 16, Created)
DT 01-NOV-1990 (Rel. 16, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-34; Somatostatin-14]
(Fragment).
OS Myxine glutinosa (Atlantic hagfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Hyperotreti; Myxiniiformes;
OC Myxiniidae; Myxiniinae; Myxine.
OX NCBI_TaxID=7769;
RN [1]
RP SEQUENCE.
RX MEDLINE-88195948; PubMed-2896118;

RA Conlon J.M., Askensten U., Falkmer S., Thim L.;
RT "Primary structures of somatostatins from the islet organ of the
RT hagfish suggest an anomalous pathway of posttranslational processing
RT of prosomatostatin-1.";
RL Endocrinology 122:1855-1859(1988).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
DR PIR: A32271; A32271. Somatostatin.
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone.
FT NON_TER 1 34
FT PEPTIDE 21 34 SOMATOSTATIN-34.
FT PEPTIDE 21 34 SOMATOSTATIN-14.
FT DISULFID 23 34
SQ SEQUENCE 34 AA; 3963 MW; 54FF213AAF424C75 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 34;
Best Local Similarity 85.7%; Pred. No. 1e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 21 AGCKNFFWKTFSTC 34

RESULT 11
SMS_PIG STANDARD; PRT; 92 AA.
ID SMS_PIG
AC P01168;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-OCT-1989 (Rel. 12, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin precursor [Contains: Somatostatin-28; Somatostatin-14]
DE (Fragment).
GN SST.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE OF 1-64.
RX MEDLINE=89278131; PubMed=2567292;
RA Bersani M., Thim L., Baldissera F.G.A., Holst J.J.;
RT "Prosomatostatin 1-64 is a major product of somatostatin gene
RT expression in pancreas and gut.";
RL J. Biol. Chem. 264:10633-10636(1989).
RN [2]
RP SEQUENCE OF 1-32.
RX MEDLINE=86030691; PubMed=2865169;
RA Schmidt W.E., Mutt V., Kratzin H., Carlquist M., Conlon J.M.,
RA Creutzfeldt W.;
RT "Isolation and characterization of proSSI-32, a peptide derived from
RT the N-terminal region of porcine preprosomatostatin.";
RL FEBS Lett. 192:141-146(1985).
RN [3]
RP SEQUENCE OF 65-92.
RC TISSUE=Intestine;
RX MEDLINE=80113258; PubMed=7353633;
RA Pradayrol L., Joernvall H., Mutt V., Ribet A.;
RT "N-terminally extended somatostatin: the primary structure of
RT somatostatin-28.";
RL FEBS Lett. 109:55-58(1980).
RN [4]
RP SEQUENCE OF 65-92.
RC TISSUE=Hypothalamus;
RX MEDLINE=81054799; PubMed=6107906;
RA Schally A.V., Huang W.-Y., Chang R.C.C., Arimura A., Redding T.W.,
RA Millar R.P., Hunkapiller M.W., Hood L.E.;
RT "Isolation and structure of pro-somatostatin: a putative somatostatin
RT precursor from pig hypothalamus.";
RL Proc. Natl. Acad. Sci. U.S.A. 77:4489-4493(1980).
RN

[5]
RN SEQUENCE OF 79-92.
RX MEDLINE=76136331; PubMed=1252409;
RA Schally A.V., Dupont A., Arimura A., Redding T.W., Nishi N.,
RA Linthicum G.L., Schlesinger D.H.;
RT "Isolation and structure of somatostatin from porcine hypothalamus.";
RL Biochemistry 15:509-514(1976).
RN [6]
RP SEQUENCE OF 22-92 FROM N.A.
RA Riquet J.;
RL Submitted (SEP-1995) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC
CC EMBL; U36385; AAB38485.1;
DR PIR: A34109; RPPGS.
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone.
FT NON_TER 1 64
FT PROPEP 1 64
FT PEPTIDE 65 92 SOMATOSTATIN-28.
FT PEPTIDE 79 92 SOMATOSTATIN-14.
FT DISULFID 81 92
SQ SEQUENCE 92 AA; 10346 MW; 787CBE82CFBBAE76 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 92;
Best Local Similarity 85.7%; Pred. No. 2.6e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 79 AGCKNFFWKTFSTC 92

RESULT 12
SMSL ICTPU STANDARD; PRT; 114 AA.
ID SMSL ICTPU
AC P01171;
DT 21-JUL-1986 (Rel. 01, Created)
DT 01-AUG-1990 (Rel. 15, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin I precursor [Contains: Somatostatin-14 (SS-14)].
OS Ictalurus punctatus (Channel catfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
OC Ictaluridae; Ictalurus.
OX NCBI_TaxID=7998;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=85303576; PubMed=2863931;
RA Dixon J.E., Andrews P.C.;
RT "Somatostatins of the channel catfish.";
RL Adv. Exp. Med. Biol. 188:19-29(1985).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=82265698; PubMed=6179939;
RA Minth C.D., Taylor W.L., Magazin M.D., Tavianini M.A., Collier K.J.,
RA Weith H.L., Dixon J.E.;
RT "The structure of cloned DNA complementary to catfish pancreatic
RT somatostatin-14 messenger RNA.";
RL J. Biol. Chem. 257:10372-10377(1982).
RN [3]
RP SEQUENCE OF 82-114 FROM N.A.

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RX MEDLINE-82082515; PubMed-6171821;
RA Taylor W.L., Collier K.J., Deschenes R.J., Weith H.L., Dixon J.E.;
RT "Sequence analysis of a cDNA coding for a pancreatic precursor to
RL somatostatin.";
RN Proc. Natl. Acad. Sci. U.S.A. 78:6694-6698(1981).
RP [4]
RX MEDLINE-81264223; PubMed-6114953;
RA Andrews P.C., Dixon J.E.;
RT "Isolation and structure of a peptide hormone predicted from a mRNA
RL sequence. A second somatostatin from the catfish pancreas.";
RN J. Biol. Chem. 256:8267-8270(1981).
RX MEDLINE-81264223; PubMed-6114953;
RA Andrews P.C., Dixon J.E.;
RT "Isolation and structure of a peptide hormone predicted from a mRNA
RL sequence. A second somatostatin from the catfish pancreas.";
RN J. Biol. Chem. 256:8267-8270(1981).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Pancreas.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC
CC EMBL; M25903; AAA49339.1;
CC EMBL; V00607; CAA23877.1;
CC EMBL; V00608; CAA23878.1;
CC PIR; I50798; I50798.
CC PIR; S00292; RIIDS1.
CC InterPro; IPR004250; Somatostatin.
CC Pfam; PF03002; Somatostatin; 1.
CC Cleavage on pair of basic residues; Hormone; Signal;
KW Multigene family.
FT SIGNAL 1 24 PROBABLE.
FT PEPTIDE 101 114 SOMATOSTATIN-14.
FT DISULFID 103 114
FT CONFLICT 62 62 E -> Q (IN REF. 2).
SQ SEQUENCE 114 AA; 12419 MW; FEE0F2C76F74D99F CRC64;

Query Match 86.5%; Score 77; DB 1; Length 114;
Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 101 AGCKNFYWKGTSC 114

RESULT 13
SMSA_CARAU STANDARD; PRT; 114 AA.
ID SMSA_CARAU
C OYGH5;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DE Somatostatin IA precursor [Contains: Somatostatin-26; Somatostatin-
DE 14].
OS Carassius auratus (Goldfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Carassius.
OC NCBI_TaxID=7957;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Lin X.-W., Peter R.E.;
RT "Cloning and characterization of cDNAs encoding preprosomatostatin-I
RL and -II from goldfish brain.";
RL Submitted (NOV-1995) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
CC

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CC
CC EMBL; U40754; AAD09359.1;
CC InterPro; IPR004250; Somatostatin.
CC Pfam; PF03002; Somatostatin; 1.
CC Cleavage on pair of basic residues; Hormone; Signal; Multigene family.
KW SIGNAL 1 24 POTENTIAL.
FT PROPEP 25 88
FT PEPTIDE 89 114 SOMATOSTATIN-26 (POTENTIAL).
FT PEPTIDE 101 114 SOMATOSTATIN-14.
FT DISULFID 103 114 BY SIMILARITY.
SQ SEQUENCE 114 AA; 12574 MW; B5920015E2D272A4 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 114;
Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
DB 101 AGCKNFYWKGTSC 114

RESULT 14
SMSL_PROAN STANDARD; PRT; 115 AA.
ID SMSL_PROAN
AC Q9W7F0;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin I precursor (PSSI) [Contains: Somatostatin-27;
DE Somatostatin-14].
OS Protopterus annectens (African lungfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Dipnoi; Lepidosireniformes; Protopteriidae; Protopterus.
OC NCBI_TaxID=7888;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA Trabucchi M., Tostivint H., Lihmann I., Jegou S., Vallarino M.,
RA Vaudry H.;
RT "Molecular cloning of the cDNAs and distribution of the mRNAs encoding
RT two somatostatin precursors in the African lungfish Protopterus
RT annectens.";
RL J. Comp. Neurol. 410:643-652(1999).
CC -!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC
CC EMBL; AF126243; AAD39138.1;
CC InterPro; IPR004250; Somatostatin.
CC Pfam; PF03002; Somatostatin; 1.
CC Cleavage on pair of basic residues; Hormone; Multigene family; Signal.
KW SIGNAL 1 24 POTENTIAL.
FT PROPEP 25 88
FT PEPTIDE 89 115 SOMATOSTATIN-27 (POTENTIAL).
FT PEPTIDE 102 115 SOMATOSTATIN-14.
FT DISULFID 104 115 BY SIMILARITY.

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SO SEQUENCE 115 AA; 12600 MW; B0CEFE603FEAF09 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 115;
Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 102 AGCKNFYWKGTSC 115

RESULT 15
SMSL_RANRI

ID SMSL_RANRI STANDARD; PRT; 115 AA.
AC P87384; Q9PSI8;
DT 16-OCT-2001 (Rel. 40, Created)
RT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Somatostatin 1 precursor (PSS1) [Contains: Somatostatin-14 (S-I) (SSS1)]
OS Rana ridibunda (Laughing frog) (Marsh frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranioidea; Rana;
OX NCBI_TaxID=8406;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=97057290; PubMed=8901629;
RA Tostivint H., Lihmann I., Buchares C., Vieau-D., Coulouarn Y.,
RA Fournier A., Conlon J.M., Vaudry H.;
RT "Occurrence of two somatostatin variants in the frog brain:
RT characterization of the cDNAs, distribution of the mRNAs, and
RT receptor-binding affinities of the peptides.";
RL Proc. Natl. Acad. Sci. U.S.A. 93:12605-12610(1996).
RN [2]
RP SEQUENCE OF 102-115.
RC TISSUE=Brain;
RX MEDLINE=93038702; PubMed=1358069;
RA Vaudry H., Chartrel N., Conlon J.M.;
RT "Isolation of [Pro2, Met13]somatostatin-14 and somatostatin-14 from the
RT frog brain reveals the existence of a somatostatin gene family in a
RT tetrapod.";
RL Biochem. Biophys. Res. Commun. 188:477-482(1992).
CC -1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
CC -1- SUBCELLULAR LOCATION: Secreted.
CC -1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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CC -----
DR EMBL; U68136; AAC60093.1; -
DR PIR; JC6166; JC6166;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Cleavage on pair of basic residues; Hormone; Multigene family; Signal.
FT SIGNAL 1 24 BY SIMILARITY.
FT PROPEP. 25 99 BY SIMILARITY.
FT PEPTIDE 102 115 SOMATOSTATIN-14.
FT DISULFID 104 115 BY SIMILARITY.
SQ SEQUENCE 115 AA; 12691 MW; 349756FEB4ABE213 CRC64;

Query Match 86.5%; Score 77; DB 1; Length 115;
Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 102 AGCKNFYWKGTSC 115

Search completed: August 13, 2003, 14:51:19
Job time : 6.38462 secs

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OM protein - protein search, using sw model

Run on: August 13, 2003, 14:48:42 ; Search time 21.1795 seconds
(without alignments)
170.577 Million cell updates/sec

Title: US-09-727-739B-2
Perfect score: 89
Sequence: 1 AGCKNFYWKGTSC 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_23.*

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertebrate.*
- 14: sp_unclassified.*
- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archaeap.*

*red. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	89	100.0	28	13 Q9PRN9	Q9prn9 carassius a
2	89	100.0	114	13 Q90Y41	Q90y41 gnathonemus
3	89	100.0	114	13 Q90Y40	Q90y40 chitalla chi
4	89	100.0	114	13 Q90Y42	Q90y42 pantodon bu
5	89	100.0	115	13 Q90Y43	Q90y43 osteoglossu
6	79	88.8	25	13 Q9PRV0	Q9prv0 anguilla ja
7	77	86.5	114	13 Q8JHX5	Q8jhx5 brachydanio
8	77	86.5	116	13 Q90XE1	Q90xe1 acipenser t
9	77	86.5	120	13 Q90Y39	Q90y39 catostomus
10	69	77.5	111	13 Q90XE0	Q90xe0 acipenser t
11	60	67.4	107	13 Q9DDE4	Q9dde4 brachydanio
12	60	67.4	122	4 Q8IUV6	Q8iuv6 homo sapien
13	60	67.4	164	4 Q8NFE5	Q8nfe5 homo sapien
14	51	57.3	23	13 Q9PRV6	Q9prv6 anguilla ja
15	49	55.1	808	13 Q42113	Q42113 brachydanio
16	48	53.9	147	16 Q8XFZ7	Q8xfz7 salmonella

17	47	52.8	434	5	Q23217	Q23217 caenorhabdi
18	45	50.6	147	16	Q8FEE2	Q8fee2 escherichia
19	44	49.4	95	5	Q8TON9	Q8ton9 drosophila
20	44	49.4	110	10	Q8H7A7	Q8h7a7 arabidopsis
21	44	49.4	143	10	Q8H015	Q8h015 arya sativ
22	44	49.4	539	12	Q8ELF7	Q8elt7 avian infec
23	43.5	48.9	149	11	Q9CUI6	Q9cul6 m adult mal
24	43.5	48.9	843	11	Q9JJB4	Q9jjb4 mus musculu
25	43	48.3	101	15	Q65922	Q65922 caprine art
26	43	48.3	139	2	Q9ZBA3	Q9zba3 neisseria m
27	43	48.3	139	5	Q76357	Q76357 caenorhabdi
28	43	48.3	157	17	Q9HJ73	Q9hj73 thermoplas
29	43	48.3	195	16	Q9JZV6	Q9jzv6 neisseria m
30	43	48.3	720	5	Q9V5W4	Q9v5w4 drosophila
31	43	48.3	720	5	Q961T2	Q961t2 drosophila
32	43	48.3	772	5	Q60958	Q60958 leishmania
33	42.5	47.8	117	10	Q9ZTH1	Q9zth1 physalis ci
34	42.5	47.8	122	10	Q94C29	Q94c29 physalis lo
35	42	47.2	321	5	Q15757	Q15757 dictyosteli
36	42	47.2	403	10	Q8L9J4	Q8l9j4 arabidopsis
37	42	47.2	403	10	Q9FIT1	Q9fit1 arabidopsis
38	41	46.1	139	5	Q19698	Q19698 caenorhabdi
39	41	46.1	177	16	Q97GG7	Q97gg7 clostridium
40	41	46.1	284	16	Q8DH47	Q8dh47 synechococc
41	41	46.1	297	11	Q88781	Q88781 rattus ratt
42	41	46.1	326	10	Q9FXL5	Q9fxl5 avicennia m
43	41	46.1	500	16	Q9A5U0	Q9a5u0 caulobacter
44	41	46.1	502	16	Q8PFC5	Q8pfc5 xanthomonas
45	41	46.1	521	16	Q8P3U4	Q8p3u4 xanthomonas

ALIGNMENTS

RESULT 1

Q9PRN9
ID Q9PRN9 PRELIMINARY; PRT; 28 AA.
AC Q9PRN9;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE GSS-28-SOMATOSTATIN-like peptide.
OS Carassius auratus (Goldfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteiophysi; Cypriniformes;
OC Cyprinidae; Carassius.
OX NCBI_TaxID=7957;
RN [1]
RP SEQUENCE.
RX MEDLINE=96051491; PubMed=8536941;
RA Desaki T., Yano K., Yamasaki M., Ando M.;
RT "Somatostatin-, vasoactive intestinal peptide-, and granulin-like
RT peptides isolated from intestinal extracts of goldfish, Carassius
RT auratus.";
RL Gen. Comp. Endocrinol. 99:298-306(1995).
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1
SQ SEQUENCE 28 AA; 3204 MW; 15D271F677C945BE CRC64;

Query Match 100.0%; Score 89; DB 13; Length 28;
Best Local Similarity 100.0%; Pred. NO. 6.2e-08;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 15 AGCKNFYWKGTSC 28

RESULT 2

Q90Y41
ID Q90Y41 PRELIMINARY; PRT; 114 AA.
AC Q90Y41;
DT 01-DEC-2001 (TREMBLrel. 19, Created)

```
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Gnathonemus petersii.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Mormyridae; Gnathonemus.
OX NCBI_TaxID=42645;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis.";
RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF292652; AAK97069.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12494 MW; 454DA57A309CA8F2 CRC64;

Query Match 100.0%; Score 89; DB 13; Length 114;
Best Local Similarity 100.0%; Pred. No. 2.5e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 101 AGCKNFYWKGTSC 114

RESULT 3
Q90Y40 PRELIMINARY; PRT; 114 AA.
AC Q90Y40;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Preprosomatostatin.
OS Chitala chitala (clown knife-fish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Notopteridae; Chitala.
OX NCBI_TaxID=112163;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis.";
RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF292653; AAK97070.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12561 MW; 4E3C32F58E34F971 CRC64;

Query Match 100.0%; Score 89; DB 13; Length 114;
Best Local Similarity 100.0%; Pred. No. 2.5e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 101 AGCKNFYWKGTSC 114

RESULT 4
Q90Y42 PRELIMINARY; PRT; 114 AA.
AC Q90Y42;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Pantodon buchholzi (Butterflyfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Pantodontidae; Pantodon.
OX NCBI_TaxID=8276;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis.";
RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF292651; AAK97068.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12352 MW; 7E3D44CB6A27B12F CRC64;

Query Match 100.0%; Score 89; DB 13; Length 114;
Best Local Similarity 100.0%; Pred. No. 2.5e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 101 AGCKNFYWKGTSC 114

RESULT 5
Q90Y43 PRELIMINARY; PRT; 115 AA.
AC Q90Y43;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Osteoglossum bicirrhosum (silver arowana).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
OC Osteoglossiformes; Osteoglossidae; Osteoglossum.
OX NCBI_TaxID=109271;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Characterization of variant somatostatin cDNAs from several
RT osteoglossomorphs: molecular identification and comparative
RT analysis.";
RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF292650; AAK97067.1;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 115 AA; 12791 MW; D65FBD7C6F1E4E4D CRC64;

Query Match 100.0%; Score 89; DB 13; Length 115;
Best Local Similarity 100.0%; Pred. No. 2.5e-07;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
Db 102 AGCKNFYWKGTSC 115

RESULT 6
Q9PRV0 PRELIMINARY; PRT; 25 AA.
AC Q9PRV0;
DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Somatostatin-related peptide.
OS Anguilla japonica (Japanese eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
OC Anguilla.
OX NCBI_TaxID=7937;
RN [1]
RP SEQUENCE.
```

RX MEDLINE-95053622; PubMed-7525832;
RA Uesaka T., Yano K., Yamasaki M., Nagashima K., Ando M.;
RT "Somatostatin-related peptides isolated from the eel gut: effects on
ion and water absorption across the intestine of the seawater eel.";
RL J. Exp. Biol. 188:205-216(1994).
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
SQ SEQUENCE 25 AA; 2860 MW; BFC672143A04A3F5 CRC64;

Query Match 88.8%; Score 79; DB 13; Length 25;
Best Local Similarity 92.9%; Pred. No. 2.6e-06;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 12 AGCKNFYWKGTSC 25
|||||

RESULT 7
Q8JHX5
ID Q8JHX5 PRELIMINARY; PRT; 114 AA.
AC Q8JHX5;
DT 01-OCT-2002 (TReMBLrel. 22, Created)
DT 01-OCT-2002 (TReMBLrel. 22, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Somatostatin 14.
GN SSI.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE-22045842; PubMed-12049777;
RA Devos N., Deflorian G., Biemar F., Bortolussi M., Martial J.A.,
RA Peers B., Argenton F.;
RT "Differential expression of two somatostatin genes during zebrafish
embryonic development.";
RL Mech. Dev. 115:133-137(2002).
DR EMBL: AF435965; AAM54072.1;
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
SQ SEQUENCE 114 AA; 12416 MW; 3D41424AE54E74C8 CRC64;

Query Match 86.5%; Score 77; DB 13; Length 114;
Best Local Similarity 85.7%; Pred. No. 2.5e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 101 AGCKNFYWKGTSC 114
|||||

RESULT 8
Q90XE1
ID Q90XE1 PRELIMINARY; PRT; 116 AA.
AC Q90XE1;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Somatostatin.
OS Acipenser transmontanus (White sturgeon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Chondrostei; Acipenseriformes; Acipenseridae;
OC Acipenser.
OX NCBI_TaxID=7904;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Brain;
RA Trabucchi M., Tostivint H., Lihmann I., Sollars C., Vallarino M.,
RA Dore R.M., Vaudry H.;
RT "Polygenic expression of somatostatin in the sturgeon Acipenser

RT transmontanus: molecular cloning and distribution of the mRNAs
RT encoding two somatostatin precursors.";
RL J. Comp. Neurol. 0:0-0(2001).
DR EMBL: AF395849; AAL13248.1;
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
SQ SEQUENCE 116 AA; 12616 MW; 72E0C3FF6C80650F CRC64;

Query Match 86.5%; Score 77; DB 13; Length 116;
Best Local Similarity 85.7%; Pred. No. 2.5e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 103 AGCKNFYWKGTSC 116
|||||

RESULT 9
Q90Y39
ID Q90Y39 PRELIMINARY; PRT; 120 AA.
AC Q90Y39;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Preprosomatostatin.
OS Catostomus commersoni (White sucker).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Catostomidae; Catostomus.
OX NCBI_TaxID=7971;
RN [1]
RP SEQUENCE FROM N.A.
RA Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
RT "Molecular cloning and characterization of white sucker
preprosomatostatin.";
RL Submitted (AUG-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF292654; AAK97071.1;
DR InterPro: IPR004250; Somatostatin.
DR Pfam: PF03002; Somatostatin; 1.
SQ SEQUENCE 120 AA; 13783 MW; 00828D35263E8805 CRC64;

Query Match 86.5%; Score 77; DB 13; Length 120;
Best Local Similarity 85.7%; Pred. No. 2.6e-05;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
|||||
Db 107 AGCKNFYWKGTSC 120
|||||

RESULT 10
Q90XE0
ID Q90XE0 PRELIMINARY; PRT; 111 AA.
AC Q90XE0;
DT 01-DEC-2001 (TReMBLrel. 19, Created)
DT 01-DEC-2001 (TReMBLrel. 19, Last sequence update)
DT 01-MAR-2002 (TReMBLrel. 20, Last annotation update)
DE Somatostatin pro2.
OS Acipenser transmontanus (White sturgeon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Chondrostei; Acipenseriformes; Acipenseridae;
OC Acipenser.
OX NCBI_TaxID=7904;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Brain;
RA Trabucchi M., Tostivint H., Lihmann I., Sollars C., Vallarino M.,
RA Dore R.M., Vaudry H.;
RT "Polygenic expression of somatostatin in the sturgeon Acipenser
transmontanus: molecular cloning and distribution of the mRNAs
encoding two somatostatin precursors.";
RL J. Comp. Neurol. 0:0-0(2001).
DR EMBL: AF395850; AAL13249.1;

DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 111 AA; 12748 MW; 4E27DB90896A9025 CRC64;
Query Match 77.5%; Score 69; DB 13; Length 111;
Best Local Similarity 78.6%; Pred. No. 0.00053;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 AGCKNFYWKGTSC 14
ID 98 APCKNFFWKFTSC 111
Db

RESULT 11
Q9DDE4
ID Q9DDE4 PRELIMINARY; PRT; 107 AA.
AC Q9DDE4;
DT 01-MAR-2001 (TReMBLrel. 16, Created)
DT 01-MAR-2001 (TReMBLrel. 16, Last sequence update)
DT 01-OCT-2002 (TReMBLrel. 22, Last annotation update)
DE Somatostatin.
GN SMST OR SOM.
OS Brachydanio rerio (zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
XC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
XC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE-Pancreas;
RX MEDLINE=99425190; PubMed=10495291;
RA Argenton F., Zecchin E., Bortolussi M.;
RT "Early appearance of pancreatic hormone-expressing cells in the
zebrafish embryo."
RL Mech. Dev. 87:217-221(1999).
DR EMBL; AJ238017; CAC20110.1;
DR ZFIN; ZDB-GENE-010219-2; smst.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 107 AA; 11839 MW; E12C923E56642EFB CRC64;

Query Match 67.4%; Score 60; DB 13; Length 107;
Best Local Similarity 61.5%; Pred. No. 0.016;
Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 2 GCKNFYWKGTSC 14
ID 95 GCKNFYWKSRAC 107
Db

RESULT 12
Q8IUUV6
ID Q8IUUV6 PRELIMINARY; PRT; 122 AA.
C Q8IUUV6;
DT 01-MAR-2003 (TReMBLrel. 23, Created)
DT 01-MAR-2003 (TReMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Similar to cortistatin (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE-Brain;
RA Strausberg R.;
RL Submitted (NOV-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC040034; AAH40034.1;
FT NON_TER 1
SQ SEQUENCE 122 AA; 13369 MW; A1279CA09CB0CB44 CRC64;

Query Match 67.4%; Score 60; DB 4; Length 122;
Best Local Similarity 66.7%; Pred. No. 0.019;

Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 3 CKNFYWKGTSC 14
Db 110 CRNFFWKTFSSC 121
RESULT 13
Q8NFE5
ID Q8NFE5 PRELIMINARY; PRT; 164 AA.
AC Q8NFE5;
DT 01-OCT-2002 (TReMBLrel. 22, Created)
DT 01-OCT-2002 (TReMBLrel. 22, Last sequence update)
DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
DE Hypothetical protein.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Cai Q., Guo J.H., Yu L.;
RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF521016; AAM70482.1;
DR InterPro; IPR004822; Histone_Core.
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
KW Hypothetical protein.
SQ SEQUENCE 164 AA; 19047 MW; 389682C41252426A CRC64;

Query Match 67.4%; Score 60; DB 4; Length 164;
Best Local Similarity 66.7%; Pred. No. 0.025;
Matches 8; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 3 CKNFYWKGTSC 14
Db 152 CRNFFWKTFSSC 163

RESULT 14
Q9PRV6
ID Q9PRV6 PRELIMINARY; PRT; 23 AA.
AC Q9PRV6;
DT 01-MAY-2000 (TReMBLrel. 13, Created)
DT 01-MAY-2000 (TReMBLrel. 13, Last sequence update)
DT 01-JUN-2002 (TReMBLrel. 21, Last annotation update)
DE Somatostatin homolog (Fragment).
OS Anguilla japonica (Japanese eel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
OC Anguilla.
OX NCBI_TaxID=7937;
RN [1]
RP SEQUENCE.
RX MEDLINE=95003944; PubMed=7765422;
RA Uesaka T., Yano K., Yamasaki M., Ando M.;
RL Zool. Sci. 11:491-494(1994).
FT NON_TER 1
SQ SEQUENCE 23 AA; 2655 MW; BA4317DFF3BDBD29 CRC64;

Query Match 57.3%; Score 51; DB 13; Length 23;
Best Local Similarity 90.0%; Pred. No. 0.11;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 KNFYWKGTSC 13
Db 14 KNFYWKGTSC 23

RESULT 15
O42113
ID O42113 PRELIMINARY; PRT; 808 AA.

AC O42113;
DT 01-JAN-1998 (TRENBLrel. 05, Created)
DT 01-JAN-1998 (TRENBLrel. 05, Last sequence update)
DT 01-OCT-2002 (TRENBLrel. 22, Last annotation update)
DE F-spondin1.
GN SPON1A.
OS Brachydanio rerio (Zebrafish) (Danio rerio).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
OX NCBI_TaxID=7955;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98104230; PubMed=9441663;
RA Higashijima S., Nose A., Eguchi G., Hotta Y., Okamoto H.;
T "Mindin/F-spondin family: Novel ECM proteins expressed in the
T zebrafish embryonic axis.";
RL Dev. Biol. 192:211-227(1997).
DR EMBL; AB006086; BAA22810.1; -;
DR ZFIN; ZDB-GENE-000427-9; sponla.
DR InterPro; IPR002861; Reeler.
DR InterPro; IPR000884; TSP1.
DR Pfam; PF02014; Reeler; 1.
DR Pfam; PF00090; tsp_1; 6.
DR SMART; SM00209; TSP1; 6.
DR PROSITE; PS50092; TSP1; 6.
SQ SEQUENCE 808 AA; 90645 MW; 0A24154AA4A89EC7 CRC64;

Query Match 55.1%; Score 49; DB 13; Length 808;
Best Local Similarity 57.1%; Pred. No. 8.2;
Matches 8; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
QY 1 AGCKNFYWKGTSC 14
Db 754 AGCKMKSWGWTDC 767
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